

REPORT NUMBER: ITL79510

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ISSUE DATE: 10/31/13

PREPARED FOR: RAB LIGHTING, INC.

CATALOG NUMBER: FXLED150SFY - FXLED150TY (SF=SLIPFITTER MOUNT & T=TRUNNION MOUNT)

LUMINAIRE: CAST FINNED METAL HOUSING, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER 3 LEDS, 6 CIRCUIT BOARDS EACH WITH 1 LED, CLEAR GLASS LENS IN CAST BROWN PAINTED METAL LENS FRAME WITH VISOR.

LAMPS: SIX WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS), 6 LEDS AIMED AT THE HORIZON, 4 LEDS CANTED 21-DEGREES FROM STRAIGHT AHEAD.

TOTAL INPUT WATTS = 152.8 AT 120.0 VOLTS

LED DRIVERS: TWO RAB RD-085-A2000

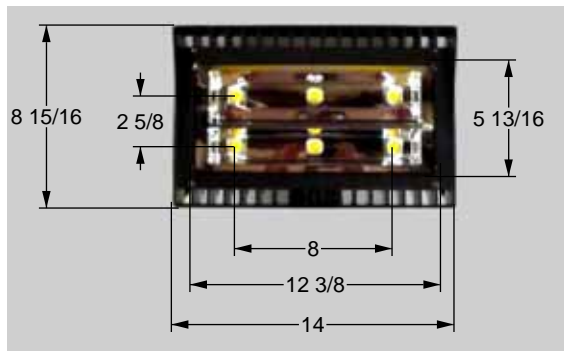
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVERS. DRIVER INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET

FLOODLIGHT CHARACTERISTICS

IES TYPE	6H X 6V	AT 29.0 H,	1.0 V	AXIAL CANDLEPOWER			
				HORIZ.	DEG	VERT.	
MAXIMUM CANDLEPOWER	7279.						
HORIZONTAL BEAM ANGLE (50%)	92.5 deg						
VERTICAL BEAM ANGLE (50%)	73.4 deg						
HORIZONTAL FIELD ANGLE (10%)	121.3 deg						
VERTICAL FIELD ANGLE (10%)	107.9 deg						
BEAM LUMENS (% FIXTURE)	8947. ( 76.0 % )						
FIELD LUMENS (% FIXTURE)	11405. ( 96.9 % )						
TOTAL LUMENS (% FIXTURE)	11774. (100.0 % )						
EFFICACY = 77.1 lm/W							
				90.0	0.	90.0	0.
				85.0	4.	85.0	0.
				75.0	41.	75.0	5.
				65.0	297.	65.0	71.
				55.0	1293.	55.0	370.
				47.5	3169.	47.5	1562.
				42.5	5017.	42.5	2548.
				37.5	6428.	37.5	3515.
				33.0	7096.	33.0	4288.
				29.0	7230.	29.0	4645.
				25.5	7151.	25.5	5089.
				22.5	6840.	22.5	5635.
				19.5	6827.	19.5	6069.
				17.0	6743.	17.0	6247.
				15.0	6526.	15.0	6334.
				13.0	6460.	13.0	6408.
				11.0	6411.	11.0	6462.
				9.0	6355.	9.0	6426.
				7.0	6325.	7.0	6357.
				5.0	6324.	5.0	6190.
				3.0	6334.	3.0	6283.
				1.0	6335.	1.0	6365.
				0.0	6339.	0.0	6339.
				-1.0	6335.	-1.0	6272.
				-3.0	6334.	-3.0	6166.
				-5.0	6324.	-5.0	6035.
				-7.0	6325.	-7.0	5921.
				-9.0	6355.	-9.0	5848.
				-11.0	6411.	-11.0	5539.
				-13.0	6460.	-13.0	5228.
				-15.0	6526.	-15.0	5162.
				-17.0	6743.	-17.0	5126.
				-19.5	6827.	-19.5	4988.
				-22.5	6840.	-22.5	4761.
				-25.5	7151.	-25.5	4619.
				-29.0	7230.	-29.0	4419.
				-33.0	7096.	-33.0	4137.
				-37.5	6428.	-37.5	3511.
				-42.5	5017.	-42.5	2582.
				-47.5	3169.	-47.5	1759.
				-55.0	1293.	-55.0	733.
				-65.0	297.	-65.0	63.
				-75.0	41.	-75.0	64.
				-85.0	4.	-85.0	6.
				-90.0	0.	-90.0	0.



Checked ..... *M KLOPF* .....  
Approved ..... *R BEATTIE* .....  
Lighting Engineer

ALL CANDELA AND LUMEN VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY.

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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CANDELA TABULATION

AVERAGE OF RIGHT AND LEFT SIDES

	0.0	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0	19.5	22.5	25.5	29.0	33.0	37.5	42.5	47.5	55.0	65.0	75.0	85.0	90.0	
90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75.0	5.	6.	6.	8.	10.	7.	7.	6.	7.	6.	8.	9.	10.	8.	7.	7.	5.	3.	2.	1.	1.	1.	1.	0.
65.0	71.	71.	73.	74.	73.	72.	73.	75.	71.	66.	66.	68.	69.	70.	68.	59.	46.	37.	17.	9.	4.	1.	0.	0.
55.0	370.	366.	355.	364.	360.	380.	403.	407.	376.	375.	378.	351.	321.	301.	257.	227.	166.	104.	67.	24.	10.	2.	0.	0.
47.5	1562.	1556.	1560.	1574.	1573.	1562.	1562.	1540.	1514.	1493.	1453.	1371.	1297.	1213.	1070.	808.	544.	369.	177.	54.	14.	2.	0.	0.
42.5	2548.	2538.	2544.	2552.	2544.	2548.	2533.	2495.	2466.	2409.	2341.	2265.	2159.	2065.	1870.	1511.	987.	566.	284.	74.	18.	2.	0.	0.
37.5	3515.	3506.	3509.	3513.	3520.	3521.	3509.	3479.	3423.	3345.	3262.	3201.	3126.	3024.	2809.	2387.	1615.	911.	387.	92.	21.	3.	0.	0.
33.0	4288.	4287.	4287.	4288.	4301.	4310.	4301.	4253.	4188.	4118.	4064.	4021.	3970.	3892.	3744.	3252.	2272.	1329.	495.	99.	24.	3.	0.	0.
29.0	4645.	4645.	4642.	4647.	4655.	4650.	4631.	4599.	4545.	4494.	4516.	4506.	4488.	4484.	4316.	3808.	2782.	1657.	644.	104.	26.	3.	0.	0.
25.5	5089.	5093.	5088.	5085.	5099.	5097.	5073.	5043.	4992.	4938.	4964.	5008.	5013.	4985.	4819.	4283.	3208.	1891.	746.	153.	28.	3.	0.	0.
22.5	5635.	5641.	5637.	5633.	5643.	5640.	5616.	5579.	5525.	5461.	5486.	5575.	5596.	5580.	5394.	4797.	3604.	2114.	841.	166.	30.	3.	0.	0.
19.5	6069.	6074.	6076.	6077.	6082.	6080.	6076.	6052.	6010.	5944.	5949.	6106.	6195.	6202.	6009.	5309.	3995.	2365.	932.	177.	32.	4.	0.	0.
17.0	6247.	6252.	6255.	6254.	6259.	6266.	6263.	6263.	6236.	6194.	6208.	6419.	6582.	6629.	6428.	5677.	4274.	2559.	1005.	186.	33.	4.	0.	0.
15.0	6334.	6337.	6340.	6341.	6349.	6357.	6362.	6374.	6358.	6337.	6354.	6602.	6829.	6892.	6699.	5923.	4450.	2691.	1062.	193.	34.	4.	0.	0.
13.0	6408.	6413.	6420.	6426.	6434.	6446.	6454.	6469.	6456.	6440.	6461.	6734.	7008.	7088.	6907.	6105.	4583.	2807.	1114.	199.	35.	4.	0.	0.
11.0	6462.	6459.	6465.	6471.	6476.	6482.	6495.	6506.	6505.	6497.	6519.	6801.	7103.	7186.	7001.	6225.	4698.	2910.	1162.	204.	36.	4.	0.	0.
9.0	6426.	6423.	6425.	6427.	6433.	6438.	6456.	6476.	6488.	6481.	6496.	6765.	7081.	7170.	7012.	6277.	4792.	3000.	1204.	210.	37.	4.	0.	0.
7.0	6357.	6344.	6338.	6330.	6329.	6345.	6384.	6420.	6448.	6467.	6503.	6793.	7119.	7210.	7008.	6288.	4870.	3079.	1240.	215.	39.	4.	0.	0.
5.0	6190.	6190.	6182.	6183.	6201.	6249.	6319.	6382.	6431.	6459.	6505.	6799.	7144.	7257.	7059.	6344.	4946.	3144.	1264.	219.	40.	4.	0.	0.
3.0	6283.	6285.	6281.	6279.	6284.	6321.	6383.	6451.	6476.	6508.	6552.	6798.	7159.	7273.	7133.	6437.	5015.	3178.	1275.	225.	40.	4.	0.	0.
1.0	6365.	6360.	6358.	6350.	6358.	6390.	6447.	6501.	6550.	6740.	6835.	6884.	7186.	7279.	7134.	6451.	5026.	3172.	1289.	230.	41.	4.	0.	0.
0.0	6339.	6335.	6334.	6324.	6325.	6355.	6411.	6460.	6526.	6743.	6827.	6840.	7151.	7230.	7096.	6428.	5017.	3169.	1293.	297.	41.	4.	0.	0.
-1.0	6272.	6266.	6266.	6261.	6263.	6291.	6342.	6382.	6439.	6551.	6689.	6785.	7090.	7170.	7046.	6396.	4987.	3161.	1298.	233.	42.	4.	0.	0.
-3.0	6166.	6154.	6149.	6152.	6156.	6174.	6218.	6255.	6269.	6265.	6299.	6528.	6890.	7007.	6907.	6290.	4893.	3134.	1302.	231.	41.	4.	0.	0.
-5.0	6035.	6041.	6034.	6028.	6025.	6035.	6063.	6084.	6083.	6048.	6039.	6269.	6628.	6747.	6643.	6073.	4777.	3108.	1296.	228.	41.	5.	0.	0.
-7.0	5921.	5923.	5921.	5918.	5913.	5910.	5925.	5920.	5899.	5842.	5803.	6001.	6309.	6384.	6306.	5821.	4656.	3063.	1277.	222.	41.	5.	0.	0.
-9.0	5848.	5835.	5831.	5825.	5812.	5790.	5784.	5752.	5713.	5637.	5584.	5793.	6077.	6153.	6048.	5575.	4505.	2984.	1244.	216.	40.	4.	0.	0.
-11.0	5539.	5504.	5497.	5499.	5518.	5514.	5511.	5498.	5481.	5449.	5452.	5671.	5941.	6000.	5885.	5388.	4345.	2889.	1205.	209.	38.	4.	0.	0.
-13.0	5228.	5226.	5224.	5241.	5259.	5280.	5300.	5314.	5318.	5303.	5327.	5578.	5827.	5906.	5783.	5285.	4241.	2806.	1160.	203.	37.	4.	0.	0.
-15.0	5162.	5154.	5163.	5176.	5191.	5204.	5215.	5222.	5214.	5191.	5219.	5455.	5672.	5738.	5644.	5165.	4110.	2686.	1103.	196.	35.	4.	0.	0.
-17.0	5126.	5126.	5130.	5140.	5144.	5144.	5139.	5134.	5120.	5090.	5129.	5353.	5536.	5590.	5488.	5004.	3934.	2528.	1033.	190.	34.	4.	0.	0.
-19.5	4988.	4991.	4991.	4983.	4977.	4974.	4959.	4939.	4913.	4883.	4936.	5136.	5288.	5345.	5249.	4758.	3694.	2320.	945.	180.	32.	4.	0.	0.
-22.5	4761.	4767.	4762.	4752.	4740.	4727.	4717.	4704.	4682.	4659.	4725.	4890.	4999.	5060.	4967.	4472.	3412.	2068.	840.	168.	30.	4.	0.	0.
-25.5	4619.	4624.	4619.	4607.	4591.	4573.	4546.	4524.	4499.	4476.	4553.	4674.	4756.	4801.	4681.	4172.	3100.	1835.	732.	106.	28.	4.	0.	0.
-29.0	4419.	4422.	4424.	4420.	4406.	4388.	4362.	4335.	4297.	4268.	4309.	4352.	4385.	4410.	4286.	3778.	2710.	1584.	606.	102.	26.	4.	0.	0.
-33.0	4137.	4139.	4140.	4133.	4108.	4093.	4051.	4013.	3959.	3920.	3878.	3859.	3841.	3831.	3712.	3229.	2216.	1282.	465.	95.	23.	4.	0.	0.
-37.5	3511.	3515.	3513.	3498.	3472.	3451.	3418.	3379.	3338.	3285.	3213.	3147.	3109.	3055.	2891.	2443.	1617.	912.	355.	86.	21.	3.	0.	0.
-42.5	2582.	2584.	2583.	2584.	2566.	2546.	2532.	2508.	2472.	2429.	2364.	2301.	2225.	2168.	1998.	1605.	1028.	565.	256.	70.	18.	3.	0.	0.
-47.5	1759.	1761.	1761.	1760.	1753.	1753.	1734.	1715.	1690.	1654.	1602.	1542.	1482.	1388.	1234.	933.	574.	342.	148.	53.	16.	3.	0.	0.
-55.0	733.	731.	731.	739.	741.	731.	719.	694.	676.	649.	613.	571.	526.	487.	398.	303.	172.	96.	67.	26.	13.	2.	0.	0.
-65.0	63.	63.	65.	70.	79.	82.	69.	70.	80.	77.	77.	66.	59.	62.	56.	47.	38.	34.	29.	17.	8.	2.	0.	0.
-75.0	64.	64.	65.	65.	65.	66.	67.	69.	70.	71.	70.	67.	62.	56.	48.	43.	38.	30.	17.	8.	4.	1.	0.	0.
-85.0	6.	5.	8.	8.	9.	9.	9.	9.	10.	9.	9.	9.	8.	8.	8.	8.	6.	3.	3.	2.	1.	0.	0.	0.
-90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

BEAM EDGE = 3640. CP = 50% OF MAX  
FIELD EDGE = 728. CP = 10% OF MAX

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CANDELA TABULATION - FIELD ONLY

AVERAGE OF RIGHT AND LEFT SIDES

Table with 21 columns representing beam angles from 0.0 to 90.0 and 21 rows representing field heights from 90.0 to -90.0. Each cell contains a numerical value representing the average of right and left sides.

BEAM EDGE = 3640. CP = 50% OF MAX
FIELD EDGE = 728. CP = 10% OF MAX

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LUMEN TABULATION

AVERAGE OF RIGHT AND LEFT SIDES

	0	2	4	6	8	10	12	14	16	18	21	24	27	31	35	40	45	50	60	70	80	90	TOTAL
90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	9.
60	2.	2.	2.	2.	2.	2.	2.	2.	2.	3.	3.	3.	3.	3.	3.	2.	1.	1.	0.	0.	0.	0.	42.
50	5.	5.	5.	5.	5.	5.	5.	4.	4.	6.	6.	5.	6.	5.	5.	3.	2.	2.	0.	0.	0.	0.	83.
45	8.	8.	8.	8.	8.	8.	7.	7.	7.	10.	10.	9.	11.	10.	9.	6.	3.	2.	0.	0.	0.	0.	138.
40	11.	11.	11.	11.	11.	10.	10.	10.	10.	14.	14.	13.	16.	14.	14.	9.	5.	3.	1.	0.	0.	0.	197.
35	10.	10.	10.	10.	10.	10.	10.	10.	10.	14.	14.	13.	17.	15.	16.	10.	5.	3.	1.	0.	0.	0.	200.
31	11.	11.	11.	11.	11.	11.	11.	11.	10.	16.	15.	15.	19.	18.	18.	12.	7.	4.	1.	0.	0.	0.	225.
27	9.	9.	9.	9.	9.	9.	9.	9.	9.	13.	13.	12.	16.	15.	16.	11.	6.	4.	1.	0.	0.	0.	187.
24	10.	10.	10.	10.	10.	10.	10.	10.	10.	14.	14.	14.	18.	17.	17.	12.	7.	4.	1.	0.	0.	0.	208.
21	11.	11.	11.	11.	11.	11.	11.	11.	10.	15.	15.	15.	20.	18.	19.	13.	7.	5.	1.	0.	0.	0.	228.
18	8.	8.	8.	8.	8.	7.	7.	7.	7.	11.	11.	11.	14.	13.	14.	10.	5.	4.	0.	0.	0.	0.	160.
16	8.	8.	8.	8.	8.	8.	8.	7.	7.	11.	11.	11.	15.	14.	14.	10.	6.	4.	0.	0.	0.	0.	164.
14	8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	10.	6.	4.	1.	0.	0.	0.	168.
12	8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.	1.	0.	0.	0.	170.
10	8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.	1.	0.	0.	0.	170.
8	8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.	1.	0.	0.	0.	170.
6	8.	8.	8.	7.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.	1.	0.	0.	0.	170.
4	8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	15.	16.	11.	7.	4.	1.	0.	0.	0.	172.
2	8.	8.	8.	8.	8.	8.	8.	8.	8.	12.	12.	12.	16.	15.	16.	11.	7.	4.	1.	0.	0.	0.	173.
0	8.	8.	8.	8.	8.	8.	8.	8.	8.	12.	11.	12.	15.	14.	15.	11.	7.	5.	1.	0.	0.	0.	171.
-2	7.	7.	7.	7.	7.	7.	7.	7.	7.	11.	11.	11.	15.	14.	15.	11.	6.	5.	1.	0.	0.	0.	167.
-4	7.	7.	7.	7.	7.	7.	7.	7.	7.	10.	11.	11.	14.	14.	15.	11.	6.	5.	1.	0.	0.	0.	162.
-6	7.	7.	7.	7.	7.	7.	7.	7.	7.	10.	10.	10.	14.	13.	14.	10.	6.	4.	1.	0.	0.	0.	157.
-8	7.	7.	7.	7.	7.	7.	7.	7.	7.	10.	10.	10.	13.	12.	13.	10.	6.	4.	1.	0.	0.	0.	152.
-10	7.	7.	7.	7.	7.	7.	7.	6.	6.	9.	10.	10.	13.	12.	13.	10.	6.	4.	1.	0.	0.	0.	146.
-12	6.	6.	6.	6.	6.	6.	6.	6.	6.	9.	9.	10.	13.	12.	13.	10.	6.	4.	1.	0.	0.	0.	142.
-14	6.	6.	6.	6.	6.	6.	6.	6.	6.	9.	9.	9.	12.	12.	12.	9.	6.	4.	1.	0.	0.	0.	139.
-16	6.	6.	6.	6.	6.	6.	6.	6.	6.	9.	9.	9.	12.	11.	12.	9.	5.	4.	0.	0.	0.	0.	136.
-18	9.	9.	9.	9.	9.	9.	9.	9.	9.	13.	13.	13.	17.	16.	17.	12.	7.	5.	1.	0.	0.	0.	195.
-21	9.	9.	9.	9.	9.	8.	8.	8.	8.	12.	12.	12.	16.	15.	16.	11.	6.	4.	1.	0.	0.	0.	184.
-24	8.	8.	8.	8.	8.	8.	8.	8.	8.	12.	12.	12.	15.	14.	15.	10.	6.	4.	0.	0.	0.	0.	174.
-27	11.	11.	11.	11.	11.	10.	10.	10.	10.	15.	15.	14.	19.	18.	18.	12.	7.	4.	1.	0.	0.	0.	216.
-31	10.	10.	10.	10.	10.	10.	10.	9.	9.	13.	13.	13.	16.	15.	16.	10.	5.	3.	0.	0.	0.	0.	193.
-35	11.	11.	11.	10.	10.	10.	10.	10.	10.	14.	13.	13.	16.	15.	15.	9.	5.	3.	1.	0.	0.	0.	196.
-40	8.	8.	8.	8.	8.	8.	7.	7.	7.	10.	10.	9.	12.	10.	10.	6.	3.	2.	0.	0.	0.	0.	140.
-45	5.	5.	5.	5.	5.	5.	5.	5.	5.	7.	7.	6.	7.	6.	6.	3.	2.	1.	0.	0.	0.	0.	92.
-50	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	5.	4.	4.	2.	1.	1.	0.	0.	0.	0.	70.
-60	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	0.	1.	1.	1.	0.	0.	1.	0.	0.	0.	0.	9.
-70	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	8.
-80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
-90	287.	286.	286.	285.	283.	281.	278.	274.	270.	398.	397.	394.	510.	472.	493.	343.	194.	134.	19.	3.	0.	0.	5887.

LUMEN TOTAL THIS PAGE = 5887.



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REPORT NUMBER: ITL79510  
ISSUE DATE: 10/31/13  
PREPARED FOR: RAB LIGHTING, INC.

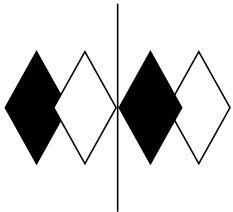
PAGE: 5 OF 7

LUMEN TABULATION - FIELD ONLY

AVERAGE OF RIGHT AND LEFT SIDES

	0	2	4	6	8	10	12	14	16	18	21	24	27	31	35	40	45	50	60	70	80	90	TOTAL
90																							0.
80																							0.
70																							0.
60																							0.
50		5.	5.	5.	5.	5.	5.	5.	4.	4.	6.	6.	5.	6.	5.	5.							76.
45		8.	8.	8.	8.	8.	8.	7.	7.	7.	10.	10.	9.	11.	10.	9.	6.						132.
40		11.	11.	11.	11.	11.	10.	10.	10.	10.	14.	14.	13.	16.	14.	14.	9.	5.					193.
35		10.	10.	10.	10.	10.	10.	10.	10.	10.	14.	14.	13.	17.	15.	16.	10.	5.					196.
31		11.	11.	11.	11.	11.	11.	11.	11.	10.	16.	15.	15.	19.	18.	18.	12.	7.					220.
27		9.	9.	9.	9.	9.	9.	9.	9.	9.	13.	13.	12.	16.	15.	16.	11.	6.	4.				187.
24		10.	10.	10.	10.	10.	10.	10.	10.	10.	14.	14.	14.	18.	17.	17.	12.	7.	4.				208.
21		11.	11.	11.	11.	11.	11.	11.	11.	10.	15.	15.	15.	20.	18.	19.	13.	7.	5.				227.
18		8.	8.	8.	8.	8.	7.	7.	7.	7.	11.	11.	11.	14.	13.	14.	10.	5.	4.				159.
16		8.	8.	8.	8.	8.	8.	8.	7.	7.	11.	11.	11.	15.	14.	14.	10.	6.	4.				164.
14		8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	10.	6.	4.				167.
12		8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.				170.
10		8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.				170.
8		8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.				170.
6		8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.				170.
4		8.	8.	8.	7.	8.	8.	8.	8.	8.	11.	11.	12.	15.	14.	15.	11.	6.	4.				169.
2		8.	8.	8.	8.	8.	8.	8.	8.	8.	11.	11.	12.	15.	15.	16.	11.	7.	4.				171.
0		8.	8.	8.	8.	8.	8.	8.	8.	8.	12.	12.	12.	16.	15.	16.	11.	7.	4.				173.
-2		8.	8.	8.	8.	8.	8.	8.	8.	8.	12.	11.	12.	15.	14.	15.	11.	7.	5.				170.
-4		7.	7.	7.	7.	7.	7.	7.	7.	7.	11.	11.	11.	15.	14.	15.	11.	6.	5.				166.
-6		7.	7.	7.	7.	7.	7.	7.	7.	7.	10.	11.	11.	14.	14.	15.	11.	6.	5.				161.
-8		7.	7.	7.	7.	7.	7.	7.	7.	7.	10.	10.	10.	14.	13.	14.	10.	6.	4.				156.
-10		7.	7.	7.	7.	7.	7.	7.	7.	7.	10.	10.	10.	13.	12.	13.	10.	6.	4.				151.
-12		7.	7.	7.	7.	7.	7.	7.	6.	6.	9.	10.	10.	13.	12.	13.	10.	6.	4.				146.
-14		6.	6.	6.	6.	6.	6.	6.	6.	6.	9.	9.	10.	13.	12.	13.	10.	6.	4.				142.
-16		6.	6.	6.	6.	6.	6.	6.	6.	6.	9.	9.	9.	12.	12.	12.	9.	6.	4.				138.
-18		6.	6.	6.	6.	6.	6.	6.	6.	6.	9.	9.	9.	12.	11.	12.	9.	5.	4.				135.
-21		9.	9.	9.	9.	9.	9.	9.	9.	9.	13.	13.	13.	17.	16.	17.	12.	7.	5.				194.
-24		9.	9.	9.	9.	9.	8.	8.	8.	8.	12.	12.	12.	16.	15.	16.	11.	6.	4.				183.
-27		8.	8.	8.	8.	8.	8.	8.	8.	8.	12.	12.	12.	15.	14.	15.	10.	6.	4.				174.
-31		11.	11.	11.	11.	11.	10.	10.	10.	10.	15.	15.	14.	19.	18.	18.	12.	7.					212.
-35		10.	10.	10.	10.	10.	10.	10.	9.	9.	13.	13.	13.	16.	15.	16.	10.	5.					189.
-40		11.	11.	11.	10.	10.	10.	10.	10.	10.	14.	13.	13.	16.	15.	15.	9.	5.					192.
-45		8.	8.	8.	8.	8.	8.	7.	7.	7.	10.	10.	9.	12.	10.	10.	6.						135.
-50		5.	5.	5.	5.	5.	5.	5.	5.	5.	7.	7.	6.	7.	6.	6.							86.
-60		4.	4.	4.	4.	4.																	22.
-70																							0.
-80																							0.
-90																							0.
	283.	283.	282.	281.	280.	273.	271.	267.	262.	388.	387.	386.	499.	463.	485.	332.	181.	102.	0.	0.	0.	5703.	

LUMEN TOTAL THIS PAGE = 5703.

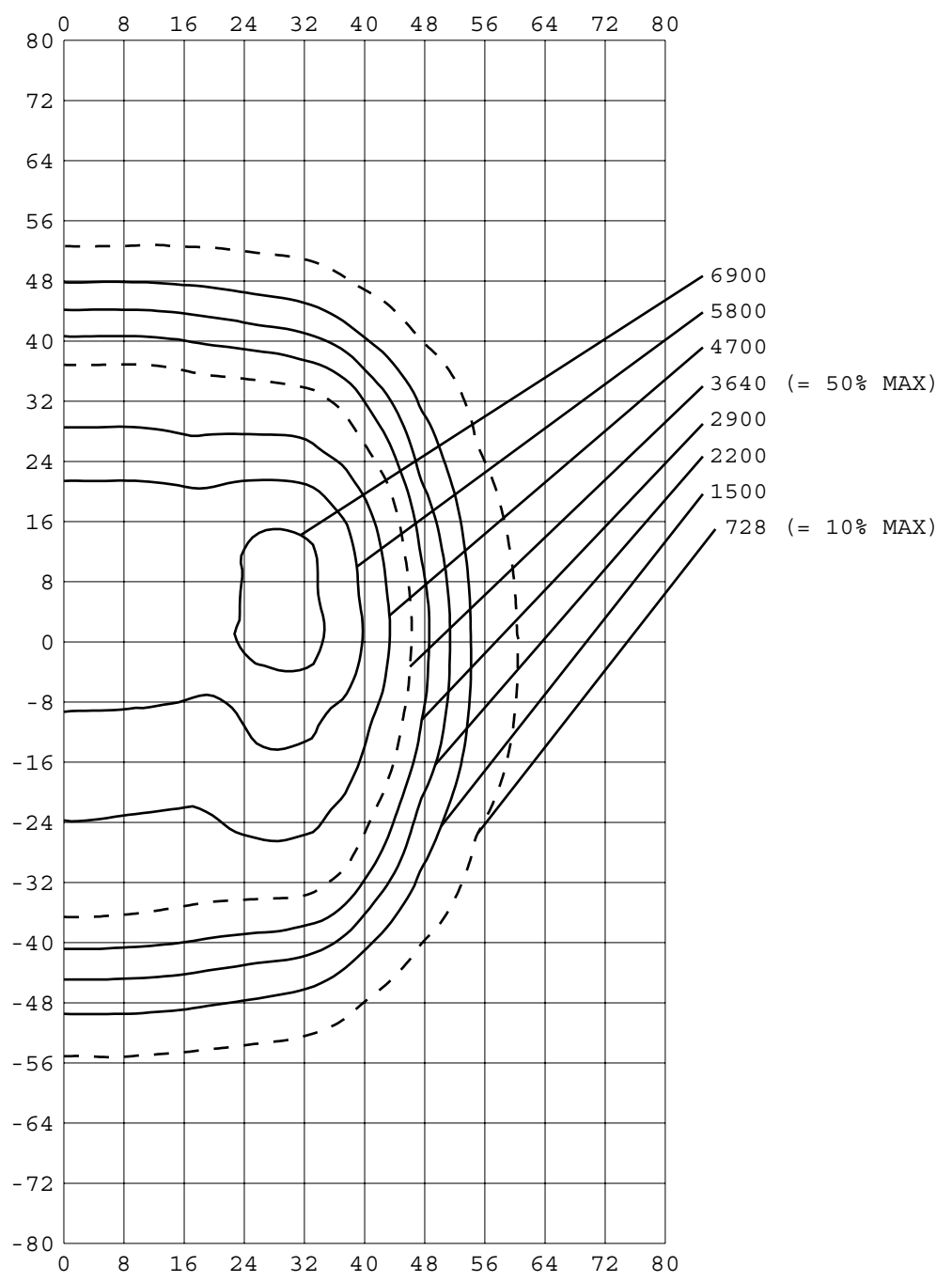


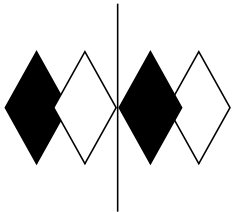
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PAGE: 6 OF 7

ISOCANDELA CURVES

AVERAGE OF RIGHT AND LEFT SIDES





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PAGE: 7 OF 7

ADDRESS: 170 LUDLOW AVE  
NORTHVALE, NJ 07647

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Page 1 of 4

REPORT NUMBER: ITL79513  
DATE: 11/07/13  
PREPARED FOR: RAB LIGHTING, INC.  
CATALOG NUMBER: FXLED150SFY - FXLED150TY (SF=SLIPFITTER MOUNT & T=TRUNNION MOUNT)

ADDRESS: 170 LUDLOW AVE  
NORTHVALE, NJ 07647

LUMINAIRE: CAST FINNED METAL HOUSING, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER 3 LEDS, 6 CIRCUIT BOARDS EACH WITH 1 LED, CLEAR GLASS LENS IN CAST BROWN PAINTED METAL LENS FRAME WITH VISOR.

LAMP: SIX WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS), 6 LEDS AIMED AT THE HORIZON, 4 LEDS CANTED 21-DEGREES FROM STRAIGHT AHEAD.

DRIVERS: TWO RAB RD-085-A2000

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120.0 AND 277.0 VAC, 60Hz) TO THE LED DRIVER.

Calibration Due:

INSTRUMENTS: Associated Power Technologies APT5040 AC Power Source N/A  
Yokogawa WT210 Digital Power Meter #9 02/28/14  
Ocean Optics QE65000 Spectroradiometer 10/16/14  
ITL 2.0m Diameter Integrating Sphere S20-2, 4PI Geometry 10/16/14

OBJECT OF TEST: Measure the Total Radiant Flux\*, Spectral Power Distribution (SPD), Correlated Color Temperature (CCT), Color Rendering Indices (CRIa,1-14), Chromaticity Coordinates (x,y; u'v'), ANSI C78.377 Duv, and electrical data including ANSI C82.77-2002 Power Factor (PF) and Total Harmonic Distortion (THD) to the test sample. Report Off-State Power. Measure electrical data including Total Harmonic Distortion (THD) at maximum rated voltage.

PROCEDURE: The test sample was provided by the customer and had an unknown number of operating hours. The test sample was mounted inside the integrating sphere and allowed to stabilize. After stabilization occurred, measurements were taken. In order to measure mean performance, multiple data sets were recorded and averaged. Readings were taken with the test sample operating at 120.0 VAC input. Electrical data was also recorded at maximum nominal rated input voltage (277.0 VAC). All testing performed in a 25 +/-1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. All data are traceable to the National Institute of Standards and Technology. Off-State Power was reported with no voltage applied to the sample.

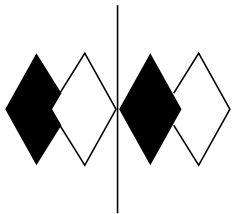
\*NOTE: Proper calibration of integrating spheres for measuring total flux output of non-directional samples will produce reliable, repeatable results within the calibration tolerances of the equipment used. However, measurement of test samples with significant self absorption and/or directional output, even when these effects are compensated for, are likely to have a greater variation in results compared to the flux output calculated from a goniophotometric exploration since these artifacts do not affect the goniophotometric results.

RESULTS: (continued subsequent pages)

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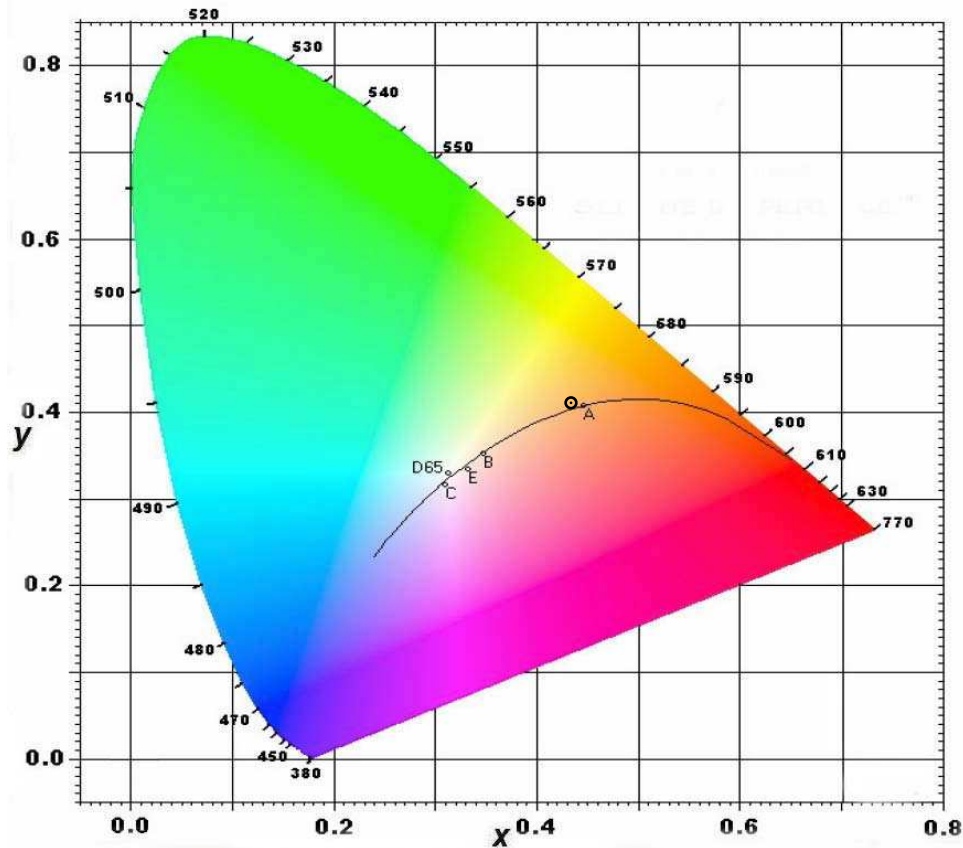
Checked P O'CONNOR  
Approved L GRABA  
Lighting Engineer





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**CIE Chromaticity Diagram**





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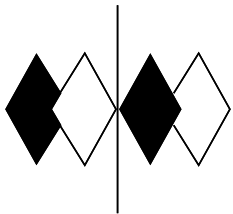
RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4334
Chromaticity Ordinate y	0.4105
Observer	CIE 1976 2 degree
Chromaticity Ordinate u'	0.2456
Chromaticity Ordinate v'	0.5234
Correlated Color Temp CCT (K)	3111
ANSI C78.377-2008 Duv	0.003
Total Radiant Flux (milliWatts)	34479 *
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	1.28
Input Power (Watts)	153.1
Input Power Factor (%)	99.7
Input Current THD (%)	5.1
Input Voltage THD (%)	0.2
Off-State Power (Watts)	0.0
ELECTRICAL AT MAX NONIMAL INPUT	
Input Voltage (Volts AC)	277.0
Input Current (Amps AC)	0.580
Input Power (Watts)	149.8
Input Power Factor (%)	93.2
Input Current THD (%)	13.4
Input Voltage THD (%)	0.1

COLOR RENDERING INDICES	CRI
Ra (Average 1-8)	80
R1 Light greyish red	77
R2 Dark greyish yellow	87
R3 Strong yellowish green	97
R4 Moderate yellowish green	79
R5 Light bluish green	78
R6 Light blue	85
R7 Light violet	83
R8 Light reddish purple	55
R9 Strong red	-6
R10 Strong yellow	72
R11 Strong green	78
R12 Strong blue	63
R13 Light yellowish pink (skin)	80
R14 Moderate olive green (leaf)	98

\*NOTE:

Proper calibration of integrating spheres for measuring total flux output of non-directional samples will produce reliable, repeatable results within the calibration tolerances of the equipment used. However, measurement of test samples with significant self absorption and/or directional output, even when these effects are compensated for, are likely to have a greater variation in results compared to the flux output calculated from a goniophotometric exploration since these artifacts do not affect the goniophotometric results.



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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.639	515	108.819	650	124.849
385	0.596	520	117.871	655	111.142
390	0.625	525	124.738	660	98.348
395	0.667	530	130.146	665	86.588
400	0.828	535	134.428	670	75.812
405	1.165	540	138.890	675	66.066
410	1.870	545	143.631	680	57.405
415	3.327	550	149.597	685	49.690
420	6.150	555	156.777	690	42.902
425	11.466	560	165.470	695	36.963
430	20.814	565	176.205	700	31.730
435	35.020	570	187.901	705	27.253
440	55.881	575	199.769	710	23.332
445	87.886	580	211.143	715	19.986
450	117.911	585	221.105	720	17.080
455	113.450	590	229.018	725	14.591
460	84.281	595	234.086	730	12.493
465	63.278	600	235.564	735	10.637
470	50.469	605	233.981	740	9.092
475	41.225	610	228.719	745	7.785
480	38.035	615	220.737	750	6.681
485	40.861	620	210.000	755	5.743
490	47.880	625	197.603	760	4.923
495	58.369	630	183.573	765	4.213
500	71.512	635	168.939	770	3.633
505	85.238	640	154.074	775	3.137
510	98.070	645	139.204	780	2.696

