

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P294011

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5571.0 lumens
Efficiency: N/A
Efficacy: 140.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

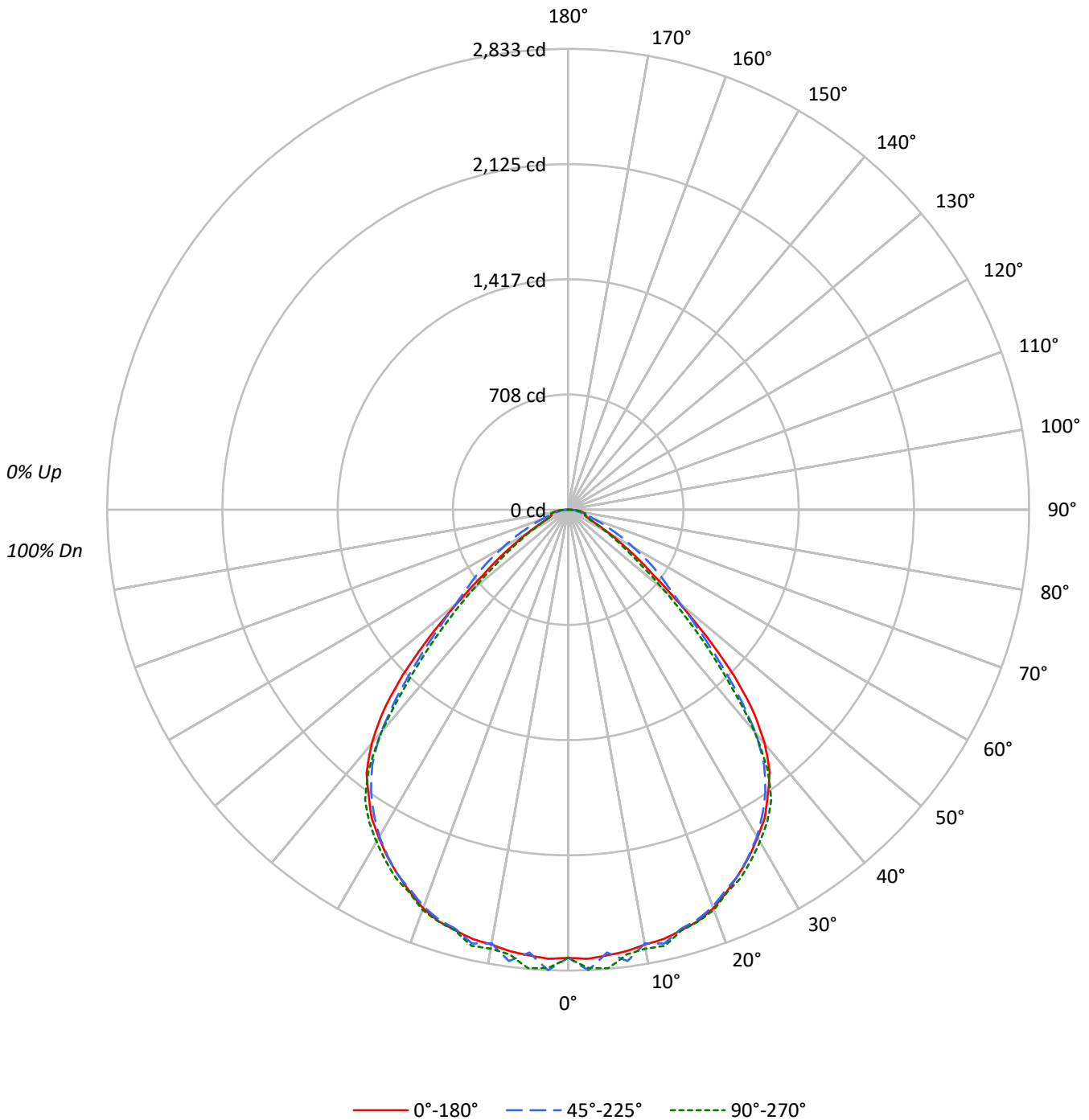
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3706	3706	3706
5°	3714	3690	3821
10°	3709	3698	3743
15°	3730	3718	3732
20°	3733	3717	3748
25°	3675	3678	3714
30°	3614	3603	3661
35°	3512	3470	3574
40°	3298	3151	3133
45°	2734	2474	2346
50°	1839	1877	1603
55°	1213	1574	1051
60°	778	1242	720
65°	501	948	487
70°	443	679	443
75°	572	540	577
80°	700	464	735
85°	815	690	857



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.8	4.7
10°-20°	757.3	13.6
20°-30°	1140.2	20.5
30°-40°	1321.5	23.7
40°-50°	1032.3	18.5
50°-60°	551.2	9.9
60°-70°	283.5	5.1
70°-80°	160.3	2.9
80°-90°	60.9	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2161.2	38.8
0°-40°	3482.8	62.5
0°-60°	5066.3	90.9
0°-90°	5571.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2755	2755	2755	2755	2755	
5°	2750	2827	2732	2808	2829	262
15°	2678	2695	2669	2686	2680	756
25°	2476	2468	2477	2474	2502	1141
35°	2138	2128	2112	2154	2176	1333
45°	1437	1438	1300	1288	1233	1083
55°	517	654	671	605	448	477
65°	158	328	298	328	153	173
75°	110	207	104	193	111	111
85°	53	69	45	69	56	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2754.7	2754.7	2754.7	2754.7	2754.7
2.5°	2763.6	2813.7	2833.4	2809.3	2820.0
5°	2750.2	2827.2	2732.3	2807.5	2829.0
7.5°	2737.7	2729.6	2798.5	2727.0	2757.4
10°	2714.4	2719.8	2706.4	2757.4	2739.5
12.5°	2703.7	2735.0	2732.3	2706.4	2745.8
15°	2677.8	2694.8	2668.8	2685.8	2679.5
17.5°	2651.8	2643.8	2641.1	2648.2	2654.5
20°	2607.1	2580.2	2596.3	2598.1	2617.8
22.5°	2542.7	2526.6	2530.1	2546.2	2548.0
25°	2475.6	2467.5	2477.4	2473.8	2501.5
27.5°	2405.8	2395.0	2401.3	2414.7	2431.7
30°	2326.2	2323.5	2319.0	2330.6	2356.6
32.5°	2247.4	2225.9	2222.4	2246.5	2276.0
35°	2138.3	2128.4	2112.3	2154.4	2175.8
37.5°	2034.5	2004.1	1978.1	2003.2	2012.1
40°	1877.9	1854.7	1793.8	1796.5	1784.0
42.5°	1685.6	1668.6	1552.3	1531.7	1496.8
45°	1436.8	1437.7	1300.0	1288.3	1232.9
47.5°	1147.9	1198.9	1079.0	1065.6	983.2
50°	878.6	970.7	896.5	875.0	765.8
52.5°	659.4	794.5	771.2	724.7	574.4
55°	517.1	654.0	671.0	604.8	448.2
57.5°	389.2	538.6	566.3	511.8	346.2
60°	289.0	453.6	461.7	440.2	267.5
62.5°	214.7	385.6	374.9	377.6	198.6
65°	157.5	328.3	297.9	327.5	153.0
67.5°	128.8	284.5	231.7	283.6	124.4
70°	112.7	252.3	172.7	249.6	112.7
72.5°	109.2	231.7	136.9	221.9	110.0
75°	110.0	206.7	103.8	193.2	110.9
77.5°	101.1	170.0	78.7	164.6	105.6
80°	90.4	128.8	59.9	130.6	94.8
82.5°	76.9	93.9	48.3	96.6	79.6
85°	52.8	68.9	44.7	68.9	55.5
87.5°	25.1	41.2	27.7	39.4	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)