

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: P294014

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294014
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-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5718.0 lumens
Efficiency: N/A
Efficacy: 142.7 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

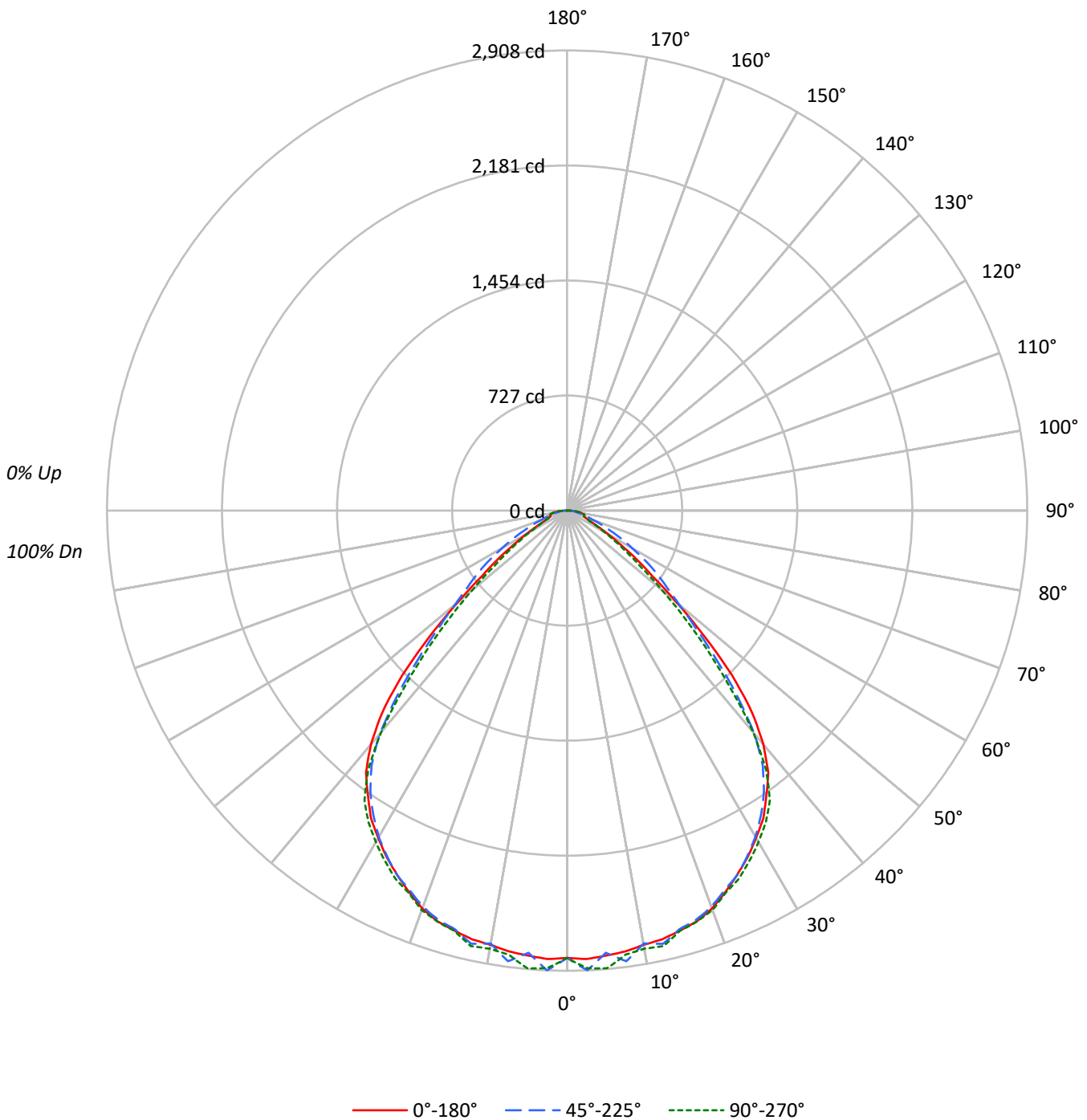
Input Watts (W): 40.083
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3804	3804	3804
5°	3813	3788	3922
10°	3806	3795	3842
15°	3828	3816	3831
20°	3831	3816	3847
25°	3772	3775	3812
30°	3709	3698	3758
35°	3605	3561	3668
40°	3385	3234	3216
45°	2806	2539	2408
50°	1888	1926	1645
55°	1245	1616	1079
60°	798	1275	739
65°	514	974	500
70°	455	697	455
75°	587	554	592
80°	718	477	754
85°	837	709	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.7	4.7
10°-20°	777.3	13.6
20°-30°	1170.2	20.5
30°-40°	1356.4	23.7
40°-50°	1059.6	18.5
50°-60°	565.8	9.9
60°-70°	290.9	5.1
70°-80°	164.6	2.9
80°-90°	62.5	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°	2218.3	38.8
0°-40°	3574.7	62.5
0°-60°	5200.0	90.9
0°-90°	5718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5718.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2827	2827	2827	2827	2827	
5°	2823	2902	2804	2882	2904	268
15°	2748	2766	2739	2757	2750	776
25°	2541	2533	2543	2539	2568	1171
35°	2195	2185	2168	2211	2233	1368
45°	1475	1476	1334	1322	1265	1111
55°	531	671	689	621	460	490
65°	162	337	306	336	157	178
75°	113	212	106	198	114	114
85°	54	71	46	71	57	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2827.4	2827.4	2827.4	2827.4	2827.4
2.5°	2836.6	2888.0	2908.2	2883.4	2894.4
5°	2822.8	2901.8	2804.4	2881.6	2903.6
7.5°	2809.9	2801.7	2872.4	2798.9	2830.1
10°	2786.1	2791.6	2777.8	2830.1	2811.8
12.5°	2775.0	2807.2	2804.4	2777.8	2818.2
15°	2748.4	2765.9	2739.2	2756.7	2750.3
17.5°	2721.8	2713.5	2710.8	2718.1	2724.5
20°	2675.9	2648.3	2664.9	2666.7	2686.9
22.5°	2609.8	2593.2	2596.9	2613.4	2615.3
25°	2540.9	2532.6	2542.7	2539.0	2567.5
27.5°	2469.3	2458.2	2464.7	2478.4	2495.9
30°	2387.5	2384.8	2380.2	2392.1	2418.8
32.5°	2306.7	2284.7	2281.0	2305.8	2336.1
35°	2194.7	2184.6	2168.1	2211.2	2233.3
37.5°	2088.2	2056.9	2030.3	2056.0	2065.2
40°	1927.5	1903.6	1841.2	1843.9	1831.1
42.5°	1730.0	1712.6	1593.2	1572.1	1536.3
45°	1474.8	1475.7	1334.3	1322.3	1265.4
47.5°	1178.2	1230.5	1107.4	1093.7	1009.2
50°	901.8	996.3	920.1	898.1	786.0
52.5°	676.8	815.4	791.6	743.8	589.5
55°	530.8	671.3	688.7	620.8	460.1
57.5°	399.5	552.8	581.3	525.3	355.4
60°	296.6	465.6	473.8	451.8	274.6
62.5°	220.4	395.8	384.8	387.5	203.9
65°	161.6	337.0	305.8	336.1	157.0
67.5°	132.2	292.0	237.8	291.1	127.6
70°	115.7	259.0	177.2	256.2	115.7
72.5°	112.0	237.8	140.5	227.7	112.9
75°	112.9	212.1	106.5	198.3	113.9
77.5°	103.8	174.5	80.8	169.0	108.4
80°	92.7	132.2	61.5	134.1	97.3
82.5°	79.0	96.4	49.6	99.2	81.7
85°	54.2	70.7	45.9	70.7	56.9
87.5°	25.7	42.2	28.5	40.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)