

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: P294134

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294134  
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-L92765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4469.0 lumens  
Efficiency: N/A  
Efficacy: 115.8 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

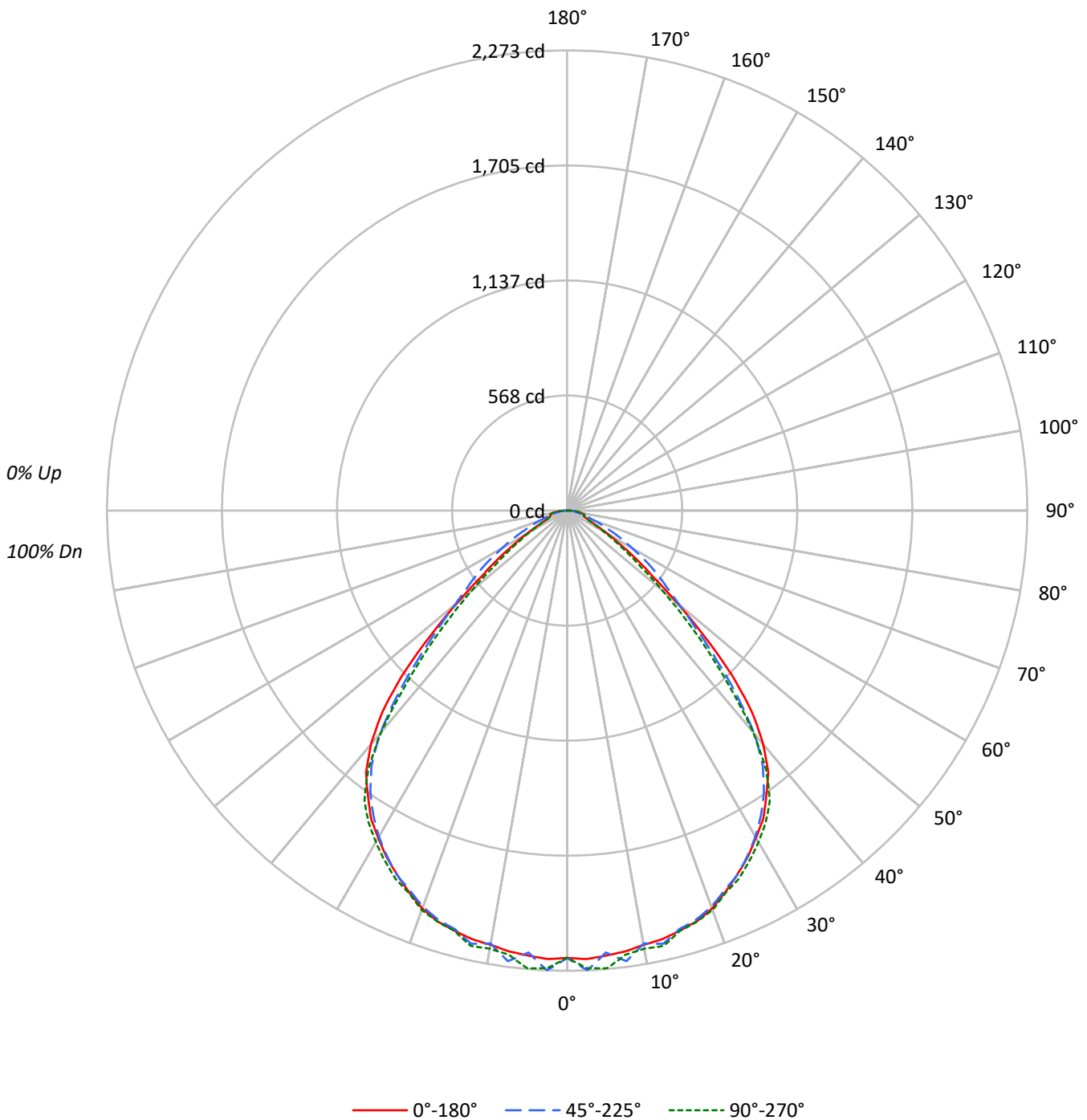
Input Watts (W): 38.595  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2973	2973	2973
5°	2980	2960	3065
10°	2975	2966	3002
15°	2992	2982	2994
20°	2995	2982	3007
25°	2948	2950	2979
30°	2899	2890	2937
35°	2817	2783	2867
40°	2646	2527	2514
45°	2193	1984	1882
50°	1475	1505	1286
55°	973	1263	844
60°	624	996	577
65°	402	761	391
70°	356	545	356
75°	459	433	463
80°	562	373	590
85°	653	554	687



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.6	4.7
10°-20°	607.5	13.6
20°-30°	914.6	20.5
30°-40°	1060.1	23.7
40°-50°	828.1	18.5
50°-60°	442.2	9.9
60°-70°	227.4	5.1
70°-80°	128.6	2.9
80°-90°	48.9	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°	1733.7	38.8
0°-40°	2793.8	62.5
0°-60°	4064.1	90.9
0°-90°	4469.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4469.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2206	2268	2192	2252	2269	210
15°	2148	2162	2141	2154	2150	607
25°	1986	1979	1987	1984	2007	915
35°	1715	1707	1694	1728	1745	1069
45°	1153	1153	1043	1034	989	869
55°	415	525	538	485	360	383
65°	126	263	239	263	123	139
75°	88	166	83	155	89	89
85°	42	55	36	55	44	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2209.8	2209.8	2209.8	2209.8	2209.8
2.5°	2217.0	2257.2	2272.9	2253.6	2262.2
5°	2206.2	2267.9	2191.8	2252.1	2269.4
7.5°	2196.2	2189.7	2245.0	2187.5	2211.9
10°	2177.5	2181.8	2171.0	2211.9	2197.6
12.5°	2168.9	2194.0	2191.8	2171.0	2202.6
15°	2148.1	2161.7	2140.9	2154.5	2149.5
17.5°	2127.3	2120.8	2118.6	2124.4	2129.4
20°	2091.4	2069.8	2082.8	2084.2	2100.0
22.5°	2039.7	2026.8	2029.7	2042.6	2044.0
25°	1985.9	1979.4	1987.3	1984.4	2006.7
27.5°	1929.9	1921.3	1926.3	1937.1	1950.7
30°	1866.0	1863.9	1860.3	1869.6	1890.4
32.5°	1802.9	1785.6	1782.8	1802.1	1825.8
35°	1715.3	1707.4	1694.5	1728.2	1745.4
37.5°	1632.0	1607.6	1586.8	1606.9	1614.1
40°	1506.4	1487.8	1439.0	1441.1	1431.1
42.5°	1352.1	1338.5	1245.2	1228.7	1200.7
45°	1152.6	1153.3	1042.8	1033.5	989.0
47.5°	920.8	961.7	865.5	854.8	788.8
50°	704.8	778.7	719.1	701.9	614.3
52.5°	528.9	637.3	618.7	581.3	460.8
55°	414.8	524.6	538.3	485.2	359.6
57.5°	312.2	432.1	454.3	410.5	277.7
60°	231.8	363.9	370.3	353.1	214.6
62.5°	172.2	309.3	300.7	302.9	159.3
65°	126.3	263.4	239.0	262.7	122.7
67.5°	103.3	228.2	185.9	227.5	99.8
70°	90.4	202.4	138.5	200.2	90.4
72.5°	87.6	185.9	109.8	178.0	88.3
75°	88.3	165.8	83.3	155.0	89.0
77.5°	81.1	136.4	63.2	132.1	84.7
80°	72.5	103.3	48.1	104.8	76.1
82.5°	61.7	75.4	38.8	77.5	63.9
85°	42.3	55.3	35.9	55.3	44.5
87.5°	20.1	33.0	22.2	31.6	23.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)