

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: P294004

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294004  
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-LD5-48-A19/156-UNV-L82765-W2A1-U-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4907.0 lumens  
Efficiency: N/A  
Efficacy: 145.4 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

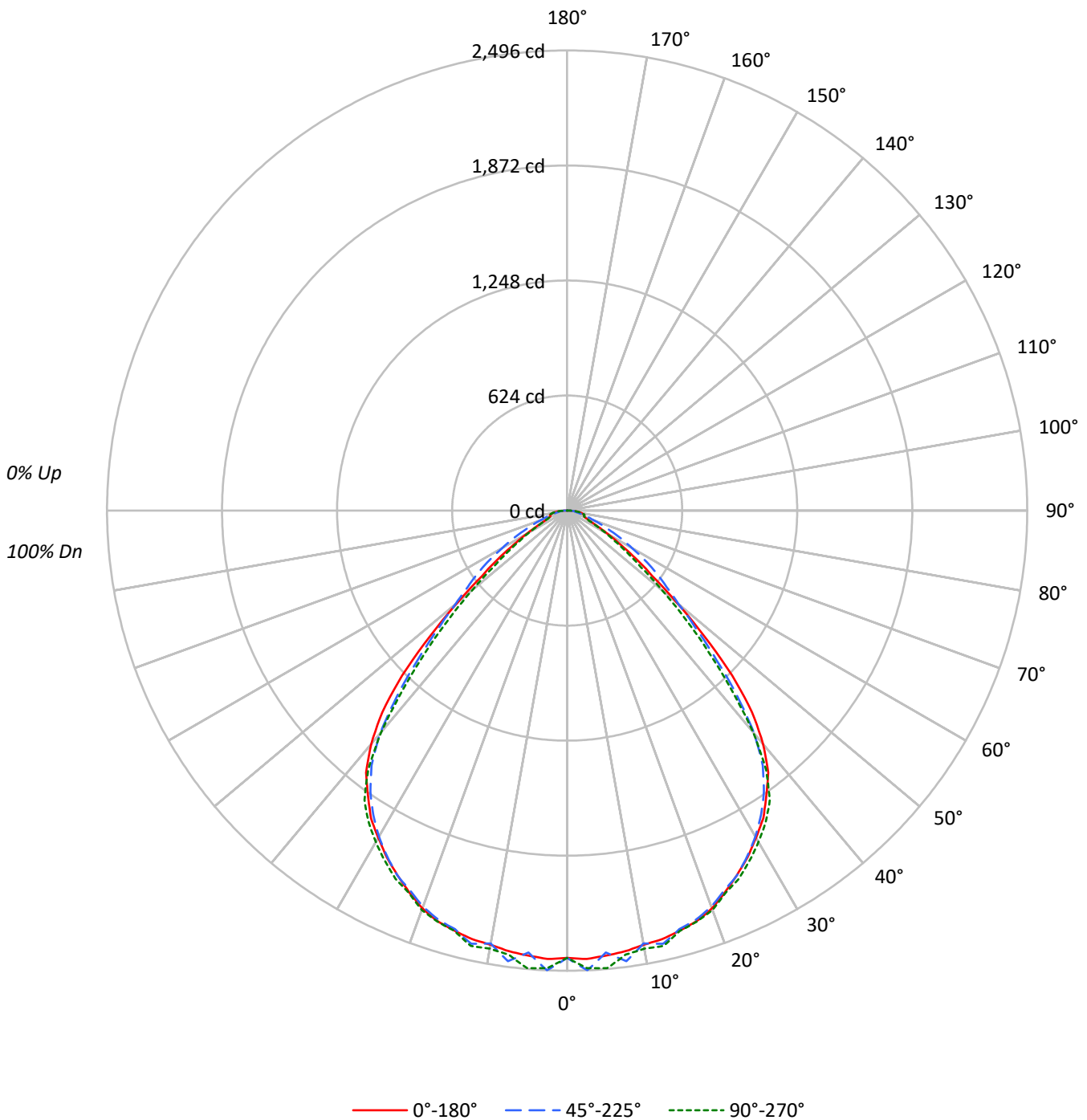
Input Watts (W): 33.759  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3265	3265	3265
5°	3272	3251	3365
10°	3267	3257	3297
15°	3285	3274	3288
20°	3288	3274	3302
25°	3237	3240	3271
30°	3183	3173	3225
35°	3094	3056	3148
40°	2905	2775	2760
45°	2408	2179	2066
50°	1620	1653	1412
55°	1069	1386	926
60°	685	1094	634
65°	442	835	429
70°	391	598	391
75°	504	475	508
80°	617	409	647
85°	718	608	755



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.3	4.7
10°-20°	667.1	13.6
20°-30°	1004.3	20.5
30°-40°	1164.0	23.7
40°-50°	909.3	18.5
50°-60°	485.5	9.9
60°-70°	249.7	5.1
70°-80°	141.2	2.9
80°-90°	53.6	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°	1903.6	38.8
0°-40°	3067.7	62.5
0°-60°	4462.5	90.9
0°-90°	4907.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4907.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2426	2426	2426	2426	2426	
5°	2422	2490	2407	2473	2492	230
15°	2359	2374	2351	2366	2360	666
25°	2180	2173	2182	2179	2203	1005
35°	1883	1875	1861	1898	1916	1174
45°	1266	1266	1145	1135	1086	954
55°	456	576	591	533	395	420
65°	139	289	262	288	135	152
75°	97	182	91	170	98	98
85°	46	61	39	61	49	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2426.4	2426.4	2426.4	2426.4	2426.4
2.5°	2434.3	2478.4	2495.7	2474.4	2483.9
5°	2422.4	2490.2	2406.7	2472.9	2491.8
7.5°	2411.4	2404.3	2465.0	2401.9	2428.7
10°	2390.9	2395.6	2383.8	2428.7	2413.0
12.5°	2381.5	2409.0	2406.7	2383.8	2418.5
15°	2358.6	2373.6	2350.7	2365.7	2360.2
17.5°	2335.7	2328.7	2326.3	2332.6	2338.1
20°	2296.3	2272.7	2286.9	2288.5	2305.8
22.5°	2239.6	2225.4	2228.6	2242.8	2244.3
25°	2180.5	2173.4	2182.1	2178.9	2203.4
27.5°	2119.0	2109.6	2115.1	2126.9	2141.9
30°	2048.9	2046.5	2042.6	2052.8	2075.7
32.5°	1979.6	1960.6	1957.5	1978.8	2004.8
35°	1883.4	1874.7	1860.6	1897.6	1916.5
37.5°	1792.0	1765.2	1742.4	1764.4	1772.3
40°	1654.1	1633.6	1580.0	1582.4	1571.3
42.5°	1484.7	1469.7	1367.2	1349.1	1318.4
45°	1265.6	1266.4	1145.0	1134.8	1085.9
47.5°	1011.1	1056.0	950.4	938.6	866.1
50°	773.9	855.0	789.6	770.7	674.6
52.5°	580.8	699.8	679.3	638.3	505.9
55°	455.5	576.1	591.0	532.7	394.8
57.5°	342.8	474.4	498.8	450.8	305.0
60°	254.5	399.5	406.6	387.7	235.6
62.5°	189.1	339.6	330.2	332.6	174.9
65°	138.7	289.2	262.4	288.4	134.8
67.5°	113.5	250.6	204.1	249.8	109.5
70°	99.3	222.2	152.1	219.9	99.3
72.5°	96.1	204.1	120.6	195.4	96.9
75°	96.9	182.0	91.4	170.2	97.7
77.5°	89.0	149.7	69.3	145.0	93.0
80°	79.6	113.5	52.8	115.1	83.5
82.5°	67.8	82.7	42.6	85.1	70.1
85°	46.5	60.7	39.4	60.7	48.9
87.5°	22.1	36.2	24.4	34.7	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)