

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: P294005

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294005
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-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: 4920.0 lumens
Efficiency: N/A
Efficacy: 145.7 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

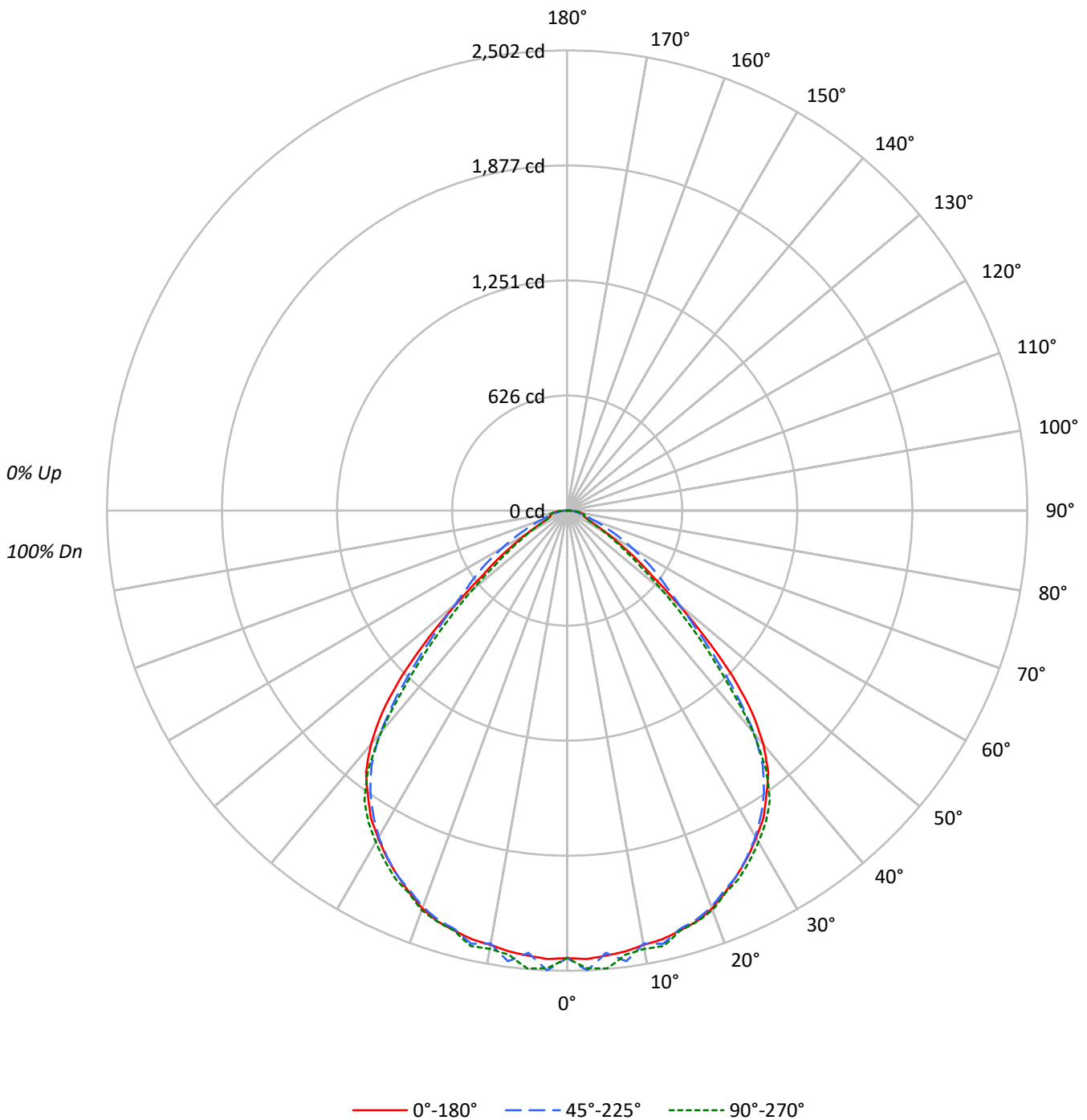
Input Watts (W): 33.759
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3273	3273	3273
5°	3280	3259	3374
10°	3275	3265	3305
15°	3294	3283	3296
20°	3297	3283	3310
25°	3246	3248	3280
30°	3192	3182	3233
35°	3102	3064	3156
40°	2913	2783	2767
45°	2414	2185	2072
50°	1624	1657	1416
55°	1071	1390	929
60°	687	1097	636
65°	443	838	430
70°	392	600	392
75°	505	477	509
80°	618	410	649
85°	719	610	756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.9	4.7
10°-20°	668.8	13.6
20°-30°	1006.9	20.5
30°-40°	1167.1	23.7
40°-50°	911.7	18.5
50°-60°	486.8	9.9
60°-70°	250.3	5.1
70°-80°	141.6	2.9
80°-90°	53.8	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°	1908.7	38.8
0°-40°	3075.8	62.5
0°-60°	4474.3	90.9
0°-90°	4920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2433	2433	2433	2433	2433	
5°	2429	2497	2413	2479	2498	231
15°	2365	2380	2357	2372	2366	668
25°	2186	2179	2188	2185	2209	1007
35°	1888	1880	1866	1903	1922	1177
45°	1269	1270	1148	1138	1089	956
55°	457	578	593	534	396	421
65°	139	290	263	289	135	153
75°	97	182	92	171	98	98
85°	47	61	40	61	49	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2432.8	2432.8	2432.8	2432.8	2432.8
2.5°	2440.7	2484.9	2502.3	2481.0	2490.5
5°	2428.8	2496.8	2413.0	2479.4	2498.4
7.5°	2417.8	2410.7	2471.5	2408.3	2435.2
10°	2397.2	2402.0	2390.1	2435.2	2419.4
12.5°	2387.8	2415.4	2413.0	2390.1	2424.9
15°	2364.8	2379.9	2356.9	2372.0	2366.4
17.5°	2341.9	2334.8	2332.5	2338.8	2344.3
20°	2302.4	2278.7	2292.9	2294.5	2311.9
22.5°	2245.5	2231.3	2234.5	2248.7	2250.3
25°	2186.3	2179.2	2187.9	2184.7	2209.2
27.5°	2124.6	2115.2	2120.7	2132.6	2147.6
30°	2054.3	2052.0	2048.0	2058.3	2081.2
32.5°	1984.8	1965.8	1962.7	1984.0	2010.1
35°	1888.4	1879.7	1865.5	1902.6	1921.6
37.5°	1796.7	1769.9	1747.0	1769.1	1777.0
40°	1658.5	1637.9	1584.2	1586.6	1575.5
42.5°	1488.6	1473.6	1370.9	1352.7	1321.9
45°	1268.9	1269.7	1148.1	1137.8	1088.8
47.5°	1013.7	1058.8	952.9	941.0	868.3
50°	775.9	857.3	791.7	772.7	676.3
52.5°	582.3	701.6	681.1	640.0	507.3
55°	456.7	577.6	592.6	534.1	395.9
57.5°	343.7	475.7	500.1	452.0	305.8
60°	255.2	400.6	407.7	388.7	236.2
62.5°	189.6	340.5	331.1	333.4	175.4
65°	139.1	290.0	263.1	289.2	135.1
67.5°	113.8	251.3	204.6	250.5	109.8
70°	99.6	222.8	152.5	220.4	99.6
72.5°	96.4	204.6	120.9	196.0	97.2
75°	97.2	182.5	91.7	170.7	98.0
77.5°	89.3	150.1	69.5	145.4	93.2
80°	79.8	113.8	52.9	115.4	83.8
82.5°	68.0	83.0	42.7	85.3	70.3
85°	46.6	60.8	39.5	60.8	49.0
87.5°	22.1	36.3	24.5	34.8	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)