

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: P293436

Luminaire Tested: **24GR-LD5-48-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-A-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5200.0 lumens
Efficiency: N/A
Efficacy: 151.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

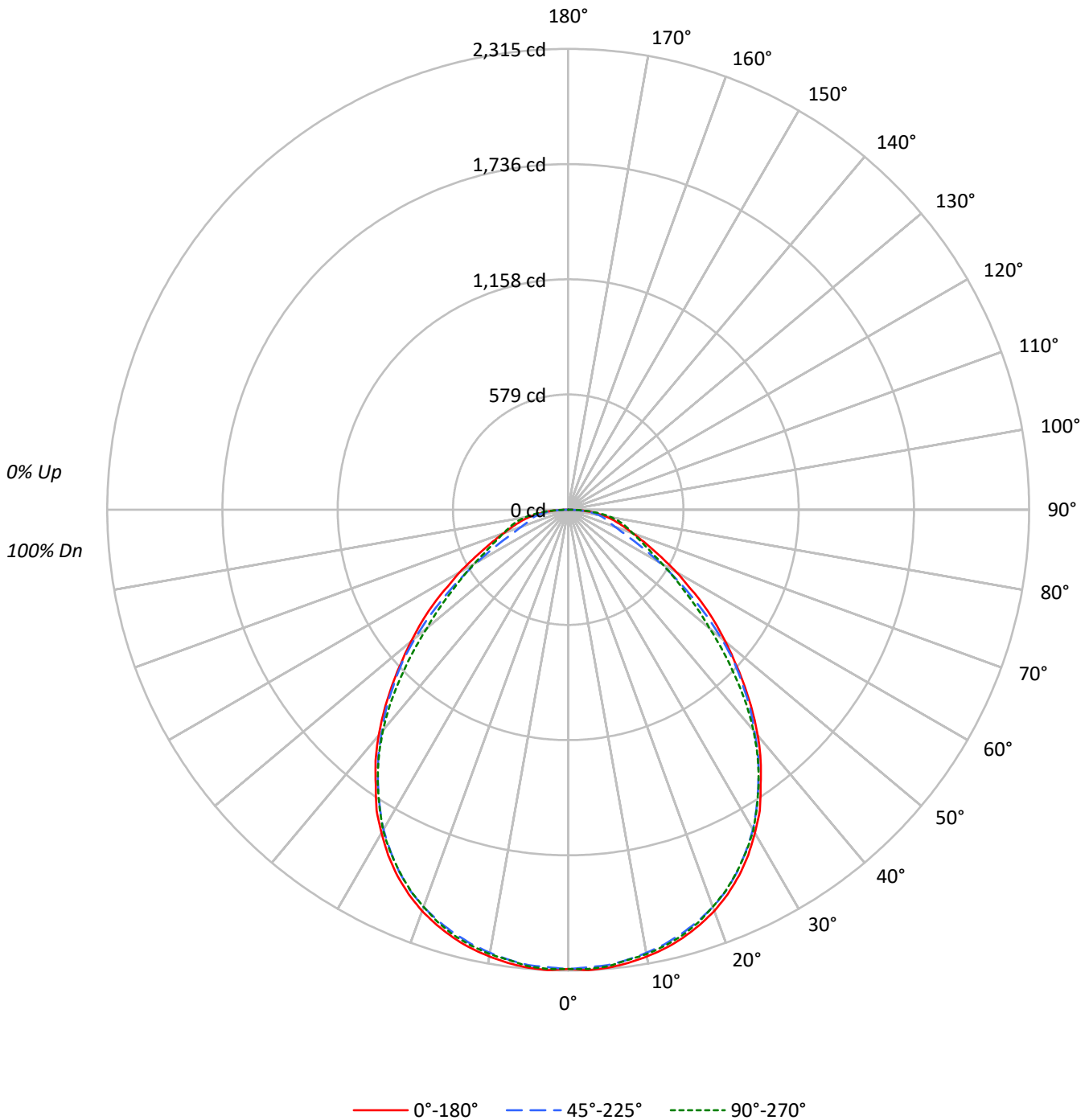
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3104	3104	3104
5°	3119	3102	3110
10°	3114	3089	3097
15°	3102	3071	3084
20°	3072	3041	3040
25°	3013	2980	2978
30°	2913	2883	2889
35°	2767	2735	2739
40°	2602	2557	2541
45°	2385	2352	2259
50°	2156	2097	1939
55°	1935	1762	1672
60°	1695	1418	1470
65°	1478	1115	1353
70°	1352	973	1352
75°	1353	1036	1491
80°	1469	1220	1699
85°	1612	1377	1823



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.5	4.2
10°-20°	623.5	12.0
20°-30°	924.5	17.8
30°-40°	1043.0	20.1
40°-50°	944.6	18.2
50°-60°	681.5	13.1
60°-70°	406.9	7.8
70°-80°	251.5	4.8
80°-90°	106.0	2.0
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°	1766.5	34.0
0°-40°	2809.5	54.0
0°-60°	4435.6	85.3
0°-90°	5200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5200.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2307	2307	2307	2307	2307	
5°	2310	2306	2297	2294	2302	219
15°	2227	2213	2204	2205	2214	628
25°	2029	2018	2008	2000	2006	932
35°	1685	1682	1665	1666	1668	1054
45°	1253	1245	1236	1206	1187	966
55°	825	799	751	714	713	737
65°	464	409	350	398	425	467
75°	260	226	199	248	287	278
85°	104	92	89	116	118	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2307.2	2307.2	2307.2	2307.2	2307.2
2.5°	2315.2	2308.8	2300.8	2305.6	2309.6
5°	2309.6	2306.4	2296.7	2294.3	2302.4
7.5°	2297.5	2289.5	2280.7	2284.7	2281.5
10°	2279.1	2271.8	2260.6	2261.4	2267.0
12.5°	2256.6	2247.7	2235.7	2238.9	2243.7
15°	2226.8	2213.2	2204.4	2205.2	2214.0
17.5°	2189.1	2178.6	2167.4	2169.8	2173.8
20°	2145.7	2140.1	2124.0	2119.2	2123.2
22.5°	2091.1	2080.6	2071.8	2069.4	2070.2
25°	2029.2	2018.0	2007.5	2000.3	2005.9
27.5°	1956.9	1947.3	1933.6	1931.2	1936.0
30°	1875.0	1867.8	1855.7	1852.5	1859.7
32.5°	1791.4	1779.4	1762.5	1762.5	1764.1
35°	1684.6	1682.2	1665.3	1666.1	1667.7
37.5°	1588.2	1576.9	1567.3	1557.7	1562.5
40°	1481.4	1468.5	1455.6	1449.2	1446.8
42.5°	1366.5	1356.8	1351.2	1327.9	1322.3
45°	1253.2	1245.2	1236.3	1205.8	1187.3
47.5°	1137.5	1135.9	1128.7	1074.9	1056.4
50°	1029.9	1027.5	1001.8	944.7	926.2
52.5°	927.9	911.8	878.0	821.8	818.6
55°	825.0	799.3	751.1	714.2	712.6
57.5°	716.6	686.0	637.0	617.0	627.4
60°	629.8	583.2	527.0	529.4	546.3
62.5°	539.8	487.6	432.2	456.3	476.4
65°	464.3	408.9	350.3	397.7	425.0
67.5°	398.5	347.0	290.8	354.3	380.8
70°	343.8	302.1	247.4	314.1	343.8
72.5°	300.4	261.9	219.3	282.0	316.5
75°	260.3	225.7	199.2	248.2	286.8
77.5°	225.7	192.0	179.9	219.3	257.1
80°	189.6	159.1	157.5	191.2	219.3
82.5°	147.8	126.9	126.9	159.9	176.7
85°	104.4	91.6	89.2	116.5	118.1
87.5°	53.8	51.4	46.6	61.1	61.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)