

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: P292945

Luminaire Tested: **24GR-LD5-72-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292945
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-F1-UNV-L83050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7230.0 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

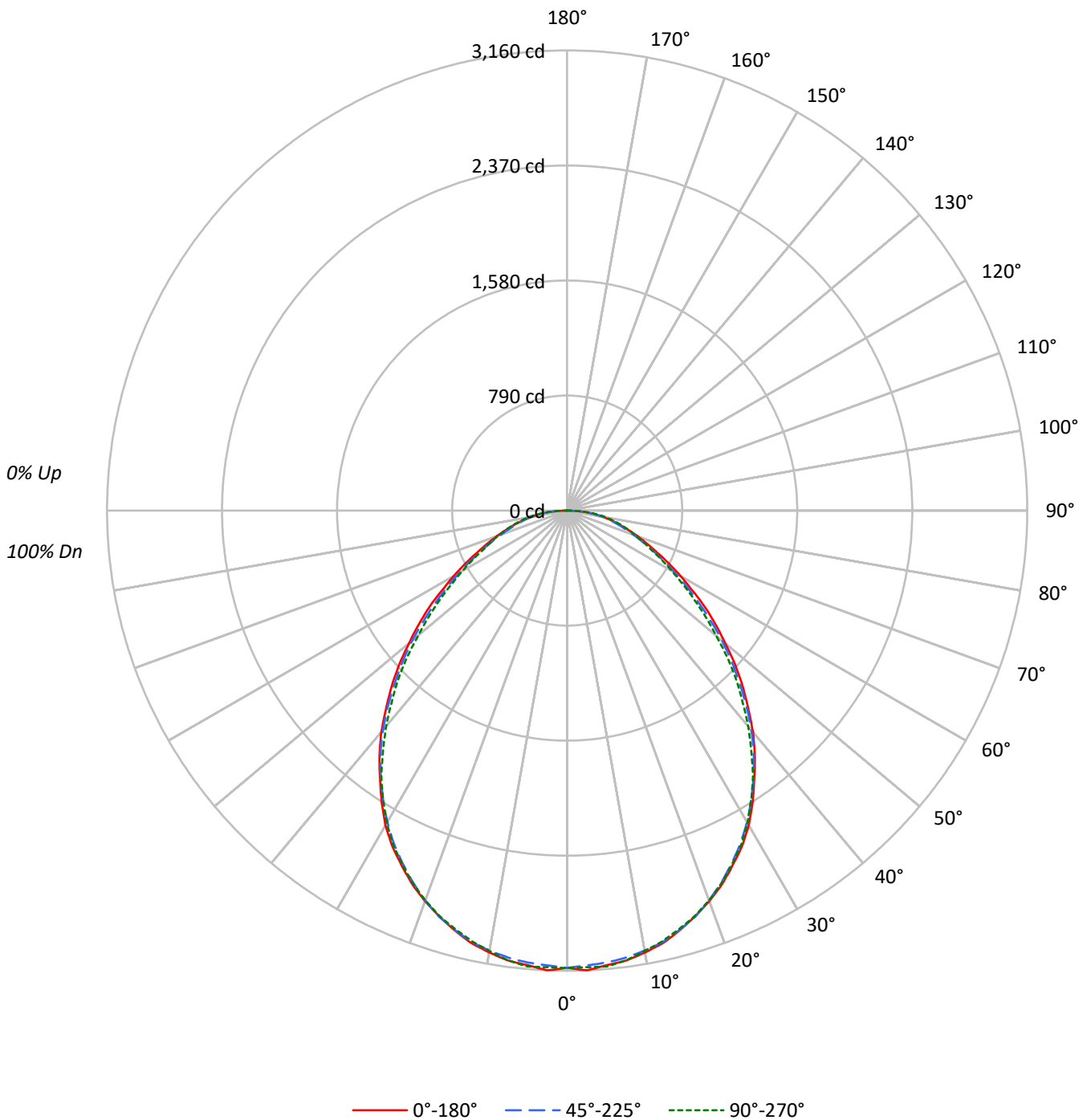
Input Watts (W): 52.545
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4226	4226	4226
5°	4232	4207	4244
10°	4209	4191	4195
15°	4157	4152	4142
20°	4087	4078	4078
25°	3992	3969	3978
30°	3876	3837	3848
35°	3681	3664	3654
40°	3486	3455	3394
45°	3240	3184	3121
50°	2969	2903	2794
55°	2711	2589	2501
60°	2416	2299	2239
65°	2174	2060	2032
70°	2018	1895	1971
75°	1930	1845	2000
80°	1929	1929	2138
85°	2002	2025	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.6	4.1
10°-20°	839.3	11.6
20°-30°	1231.8	17.0
30°-40°	1392.7	19.3
40°-50°	1287.1	17.8
50°-60°	991.7	13.7
60°-70°	656.7	9.1
70°-80°	390.9	5.4
80°-90°	143.2	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°	2367.8	32.7
0°-40°	3760.4	52.0
0°-60°	6039.2	83.5
0°-90°	7230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7230.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3140	3140	3140	3140	3140	
5°	3133	3133	3115	3117	3142	298
15°	2984	2978	2981	2980	2974	841
25°	2689	2681	2674	2671	2680	1238
35°	2241	2238	2231	2220	2225	1402
45°	1703	1691	1673	1643	1640	1312
55°	1156	1132	1104	1074	1066	1031
65°	683	672	647	641	638	685
75°	371	362	355	371	385	396
85°	130	122	131	145	146	138
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3140.5	3140.5	3140.5	3140.5	3140.5
2.5°	3159.9	3143.5	3125.6	3125.6	3139.0
5°	3133.1	3133.1	3115.2	3116.7	3142.0
7.5°	3116.7	3107.7	3095.8	3095.8	3115.2
10°	3080.9	3073.4	3067.5	3064.5	3070.5
12.5°	3042.1	3030.2	3034.7	3030.2	3028.7
15°	2984.0	2978.0	2981.0	2979.5	2973.5
17.5°	2921.3	2918.3	2924.3	2913.9	2918.3
20°	2854.2	2845.3	2848.3	2842.3	2848.3
22.5°	2778.2	2772.2	2764.7	2757.3	2769.2
25°	2688.7	2681.2	2673.8	2670.8	2679.7
27.5°	2599.2	2587.3	2576.9	2573.9	2587.3
30°	2494.8	2481.4	2469.5	2466.5	2476.9
32.5°	2371.1	2368.1	2353.2	2347.2	2351.7
35°	2241.3	2238.3	2230.9	2220.4	2224.9
37.5°	2117.6	2116.1	2105.6	2087.7	2075.8
40°	1984.8	1974.4	1966.9	1941.6	1932.6
42.5°	1838.7	1835.7	1822.3	1794.0	1783.5
45°	1703.0	1691.1	1673.2	1643.3	1640.4
47.5°	1562.8	1546.4	1530.0	1492.7	1491.2
50°	1418.2	1406.2	1386.8	1349.6	1334.7
52.5°	1284.0	1267.5	1240.7	1204.9	1197.5
55°	1155.7	1131.8	1103.5	1073.7	1066.2
57.5°	1018.5	1008.1	973.8	949.9	941.0
60°	897.7	888.8	854.5	832.1	832.1
62.5°	788.9	775.4	745.6	730.7	730.7
65°	683.0	672.5	647.2	641.2	638.2
67.5°	592.0	578.6	560.7	559.2	566.7
70°	513.0	496.6	481.7	496.6	501.1
72.5°	438.4	428.0	414.6	433.9	442.9
75°	371.3	362.4	354.9	371.3	384.7
77.5°	310.2	301.2	301.2	319.1	331.1
80°	249.0	243.1	249.0	263.9	275.9
82.5°	190.9	186.4	193.9	208.8	216.2
85°	129.7	122.3	131.2	144.6	146.1
87.5°	61.1	59.6	65.6	74.6	73.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)