

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: P291836

Luminaire Tested: **22GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291836
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-F1-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1898.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

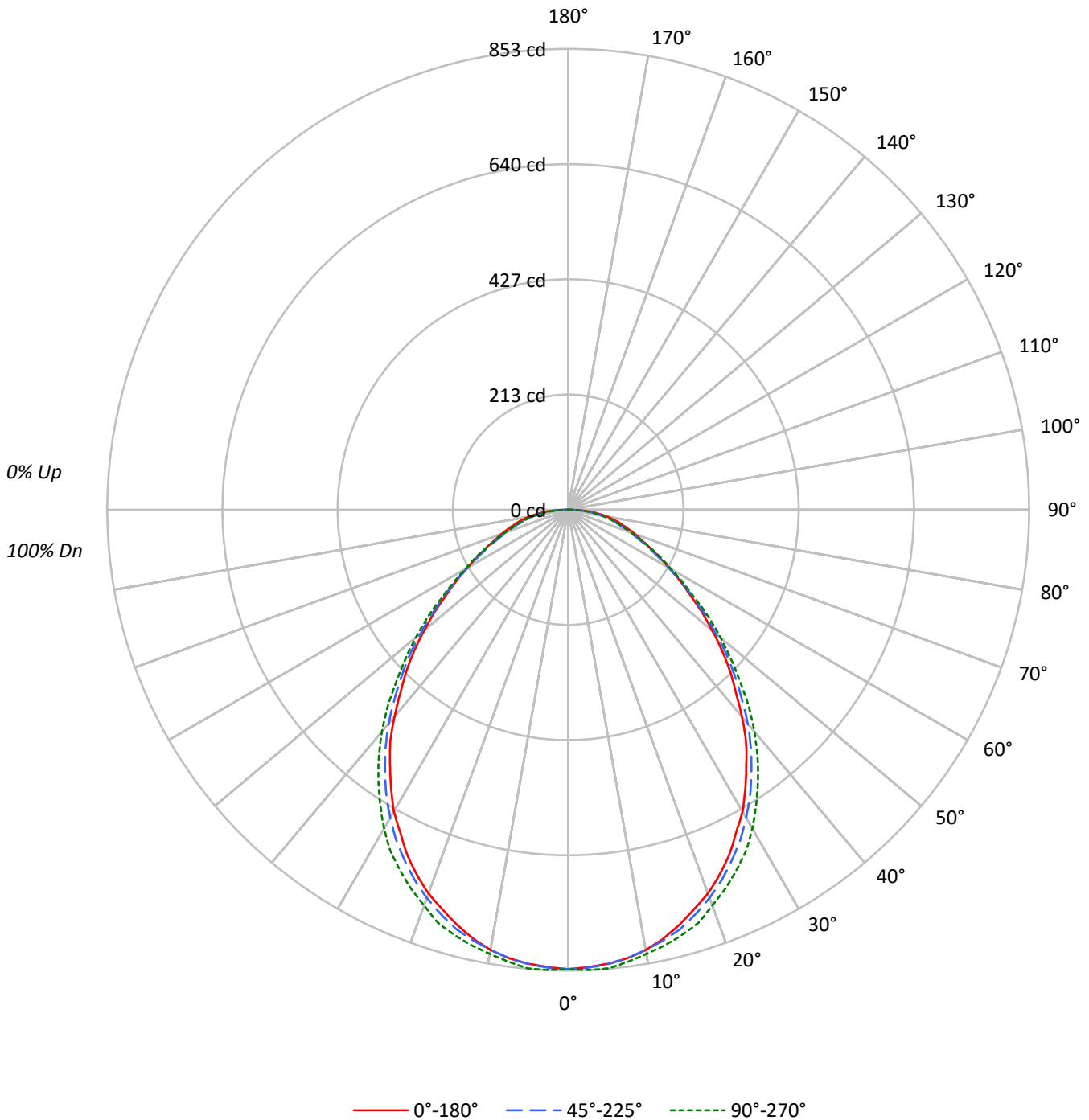
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2289	2289	2289
5°	2279	2281	2302
10°	2261	2260	2281
15°	2215	2237	2270
20°	2165	2190	2232
25°	2093	2127	2186
30°	2005	2046	2117
35°	1888	1942	2011
40°	1756	1816	1882
45°	1612	1659	1711
50°	1455	1491	1539
55°	1291	1321	1344
60°	1157	1159	1182
65°	1066	1030	1066
70°	1029	954	981
75°	1047	934	951
80°	1128	979	979
85°	1250	1037	1022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	4.2
10°-20°	226.3	11.9
20°-30°	330.3	17.4
30°-40°	369.8	19.5
40°-50°	336.5	17.7
50°-60°	253.3	13.3
60°-70°	165.3	8.7
70°-80°	99.1	5.2
80°-90°	37.2	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°	636.8	33.6
0°-40°	1006.6	53.0
0°-60°	1596.4	84.1
0°-90°	1898.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1898.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	844	842	844	848	852	80
15°	795	796	803	810	815	224
25°	705	707	716	729	736	324
35°	575	580	591	605	612	359
45°	424	428	436	445	450	326
55°	275	279	282	286	286	249
65°	167	166	162	164	167	167
75°	101	97	90	90	92	107
85°	40	39	34	32	33	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	850.5	850.5	850.5	850.5	850.5
2.5°	847.5	847.0	848.4	850.5	852.7
5°	843.6	842.3	844.4	847.5	852.3
7.5°	837.5	837.5	837.5	843.1	844.0
10°	827.4	828.3	827.0	832.7	834.8
12.5°	813.0	813.5	816.1	821.8	825.7
15°	795.2	796.0	803.0	809.6	814.8
17.5°	775.1	778.2	784.7	795.2	801.7
20°	755.9	759.4	764.7	776.0	779.5
22.5°	731.5	735.4	742.0	752.0	759.4
25°	704.9	707.1	716.3	729.3	736.3
27.5°	673.1	677.9	689.2	702.7	712.3
30°	645.2	647.8	658.3	674.0	681.4
32.5°	609.9	617.7	626.5	640.4	647.4
35°	574.6	579.8	591.1	605.1	612.1
37.5°	540.6	543.6	555.0	566.7	575.5
40°	500.0	505.7	517.0	529.7	535.8
42.5°	459.5	467.8	475.2	487.8	494.4
45°	423.7	428.1	435.9	445.1	449.5
47.5°	386.3	388.4	397.6	403.3	408.0
50°	347.5	350.1	356.2	361.8	367.5
52.5°	311.7	313.9	317.8	323.0	328.7
55°	275.1	279.0	281.6	285.5	286.4
57.5°	245.4	245.0	246.7	249.8	252.8
60°	214.9	215.8	215.4	218.4	219.7
62.5°	189.6	189.2	186.6	190.9	194.4
65°	167.4	165.7	161.7	164.4	167.4
67.5°	146.9	146.0	139.5	141.7	144.3
70°	130.8	127.7	121.2	122.5	124.7
72.5°	115.1	111.6	105.1	105.5	106.8
75°	100.7	97.2	89.8	90.2	91.5
77.5°	87.2	82.8	76.3	75.4	76.3
80°	72.8	68.9	63.2	60.6	63.2
82.5°	58.0	55.8	49.3	46.6	47.5
85°	40.5	39.2	33.6	31.8	33.1
87.5°	18.7	20.1	17.0	15.7	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)