

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: P290565

Luminaire Tested: **14GR-LD5-24-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290565
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-F1-UNV-L83050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2558.0 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

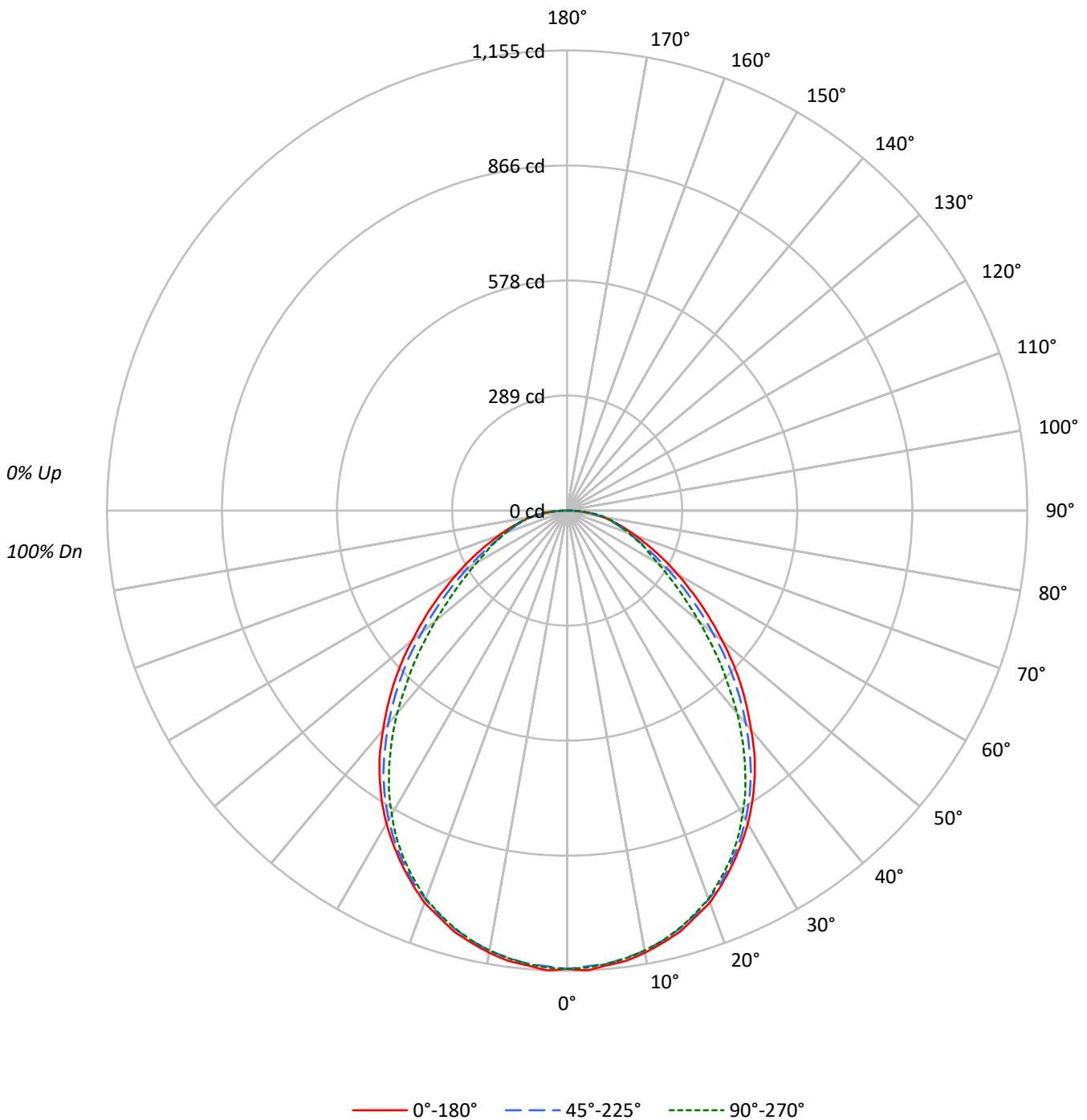
Input Watts (W): 19.158
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3096	3096	3096
5°	3095	3084	3085
10°	3079	3065	3063
15°	3048	3030	3025
20°	2999	2974	2970
25°	2912	2893	2873
30°	2819	2784	2737
35°	2695	2643	2556
40°	2523	2453	2331
45°	2343	2238	2075
50°	2126	1993	1806
55°	1923	1761	1579
60°	1726	1543	1407
65°	1549	1378	1348
70°	1430	1282	1297
75°	1365	1286	1360
80°	1381	1371	1481
85°	1430	1411	1575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	4.2
10°-20°	307.0	12.0
20°-30°	448.4	17.5
30°-40°	499.6	19.5
40°-50°	450.2	17.6
50°-60°	336.5	13.2
60°-70°	222.0	8.7
70°-80°	135.5	5.3
80°-90°	50.3	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°	864.0	33.8
0°-40°	1363.6	53.3
0°-60°	2150.3	84.1
0°-90°	2558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2558.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1146	1144	1142	1148	1142	109
15°	1094	1090	1088	1094	1086	308
25°	981	977	974	976	968	452
35°	820	813	804	790	778	511
45°	616	609	588	561	545	474
55°	410	403	375	344	337	367
65°	243	236	216	208	212	244
75°	131	129	124	128	131	140
85°	46	45	46	50	51	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1150.4	1150.4	1150.4	1150.4	1150.4
2.5°	1155.1	1149.8	1145.1	1152.2	1148.1
5°	1145.7	1144.5	1141.6	1147.5	1142.2
7.5°	1139.8	1135.7	1132.2	1139.3	1133.4
10°	1126.9	1124.6	1121.7	1127.5	1121.1
12.5°	1111.1	1108.8	1105.8	1112.9	1105.8
15°	1094.1	1090.0	1087.7	1094.1	1085.9
17.5°	1069.5	1067.7	1064.2	1070.7	1062.4
20°	1047.2	1040.8	1038.4	1043.1	1037.2
22.5°	1015.0	1010.3	1009.7	1012.6	1002.6
25°	980.9	977.4	974.5	976.3	967.5
27.5°	945.2	940.5	937.0	936.4	927.0
30°	907.1	901.2	895.9	891.2	880.7
32.5°	865.4	858.4	851.4	843.7	832.6
35°	820.3	813.3	804.5	790.4	778.1
37.5°	772.8	764.6	750.5	734.1	721.8
40°	718.3	714.2	698.3	677.2	663.7
42.5°	667.3	662.6	642.6	619.2	601.0
45°	615.7	609.2	588.1	561.1	545.3
47.5°	562.9	556.4	533.0	499.6	485.5
50°	507.8	504.3	476.1	445.6	431.5
52.5°	457.3	453.2	424.5	394.0	381.1
55°	409.9	403.4	375.3	344.2	336.6
57.5°	362.4	355.3	328.9	302.6	297.3
60°	320.7	311.9	286.7	266.2	261.5
62.5°	281.4	271.5	250.4	234.5	232.2
65°	243.3	235.7	216.4	207.6	211.7
67.5°	210.5	202.9	188.8	185.3	184.1
70°	181.8	174.7	163.0	164.2	164.8
72.5°	155.4	151.3	142.5	145.4	147.8
75°	131.3	129.0	123.7	127.8	130.8
77.5°	109.6	107.9	105.5	109.1	113.7
80°	89.1	88.0	88.5	90.9	95.6
82.5°	68.6	66.3	68.0	72.7	75.6
85°	46.3	44.6	45.7	50.4	51.0
87.5°	21.7	21.7	21.1	24.6	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)