

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: P290557

Luminaire Tested: **14GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290557
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-LD5-20-F1-UNV-L83050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1948.0 lumens
Efficiency: N/A
Efficacy: 125.4 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

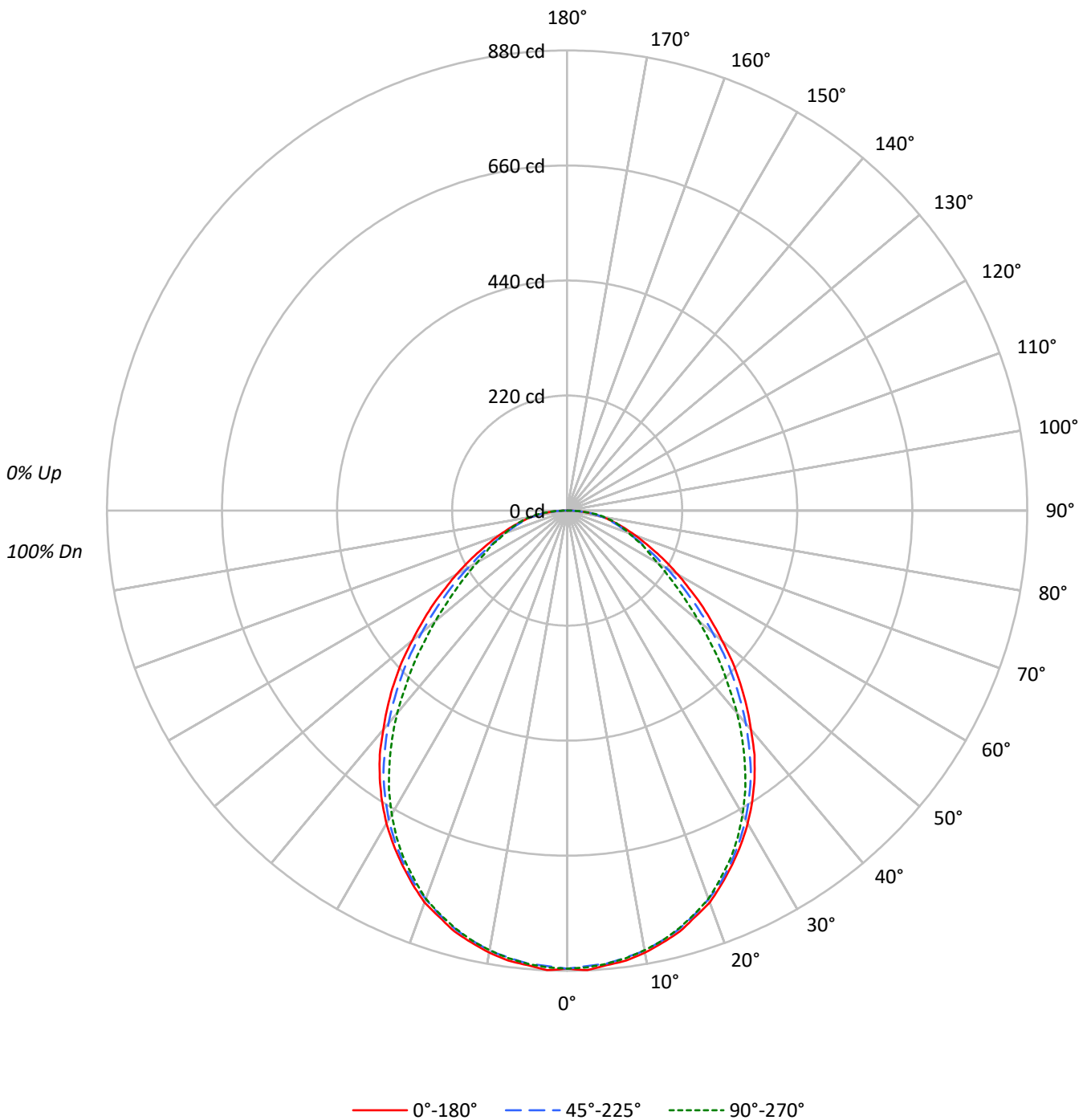
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	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	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2358	2358	2358
5°	2357	2348	2350
10°	2345	2334	2333
15°	2321	2308	2304
20°	2284	2265	2262
25°	2218	2203	2188
30°	2147	2120	2084
35°	2052	2012	1946
40°	1922	1868	1776
45°	1784	1705	1580
50°	1619	1518	1376
55°	1464	1341	1202
60°	1314	1175	1072
65°	1180	1049	1026
70°	1089	976	987
75°	1040	979	1036
80°	1052	1044	1128
85°	1090	1074	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	4.2
10°-20°	233.8	12.0
20°-30°	341.4	17.5
30°-40°	380.5	19.5
40°-50°	342.8	17.6
50°-60°	256.3	13.2
60°-70°	169.0	8.7
70°-80°	103.2	5.3
80°-90°	38.3	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°	658.0	33.8
0°-40°	1038.4	53.3
0°-60°	1637.5	84.1
0°-90°	1948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	876	876	876	876	876	
5°	872	872	869	874	870	83
15°	833	830	828	833	827	234
25°	747	744	742	743	737	344
35°	625	619	613	602	592	389
45°	469	464	448	427	415	361
55°	312	307	286	262	256	280
65°	185	180	165	158	161	186
75°	100	98	94	97	100	107
85°	35	34	35	38	39	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.1	876.1	876.1	876.1	876.1
2.5°	879.6	875.6	872.0	877.4	874.3
5°	872.5	871.6	869.4	873.8	869.8
7.5°	868.0	864.9	862.2	867.6	863.1
10°	858.2	856.4	854.2	858.7	853.7
12.5°	846.1	844.4	842.1	847.5	842.1
15°	833.2	830.1	828.3	833.2	826.9
17.5°	814.4	813.1	810.4	815.3	809.1
20°	797.5	792.6	790.8	794.4	789.9
22.5°	772.9	769.3	768.9	771.1	763.5
25°	747.0	744.3	742.1	743.4	736.8
27.5°	719.8	716.2	713.5	713.1	705.9
30°	690.8	686.3	682.3	678.7	670.7
32.5°	659.1	653.7	648.3	642.5	634.1
35°	624.7	619.3	612.6	601.9	592.5
37.5°	588.5	582.3	571.5	559.0	549.7
40°	547.0	543.9	531.8	515.7	505.5
42.5°	508.1	504.6	489.4	471.5	457.7
45°	468.8	463.9	447.9	427.3	415.3
47.5°	428.7	423.7	405.9	380.4	369.7
50°	386.7	384.0	362.6	339.4	328.6
52.5°	348.3	345.2	323.3	300.1	290.2
55°	312.1	307.2	285.8	262.1	256.3
57.5°	275.9	270.6	250.5	230.4	226.4
60°	244.2	237.5	218.3	202.7	199.1
62.5°	214.3	206.7	190.7	178.6	176.8
65°	185.3	179.5	164.8	158.1	161.2
67.5°	160.3	154.5	143.8	141.1	140.2
70°	138.4	133.1	124.1	125.0	125.5
72.5°	118.3	115.2	108.5	110.7	112.5
75°	100.0	98.2	94.2	97.3	99.6
77.5°	83.5	82.2	80.4	83.1	86.6
80°	67.9	67.0	67.4	69.2	72.8
82.5°	52.2	50.5	51.8	55.4	57.6
85°	35.3	33.9	34.8	38.4	38.8
87.5°	16.5	16.5	16.1	18.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)