

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: P290656

Luminaire Tested: **14GR-LD5-20-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290656
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-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1752.0 lumens
Efficiency: N/A
Efficacy: 110.8 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

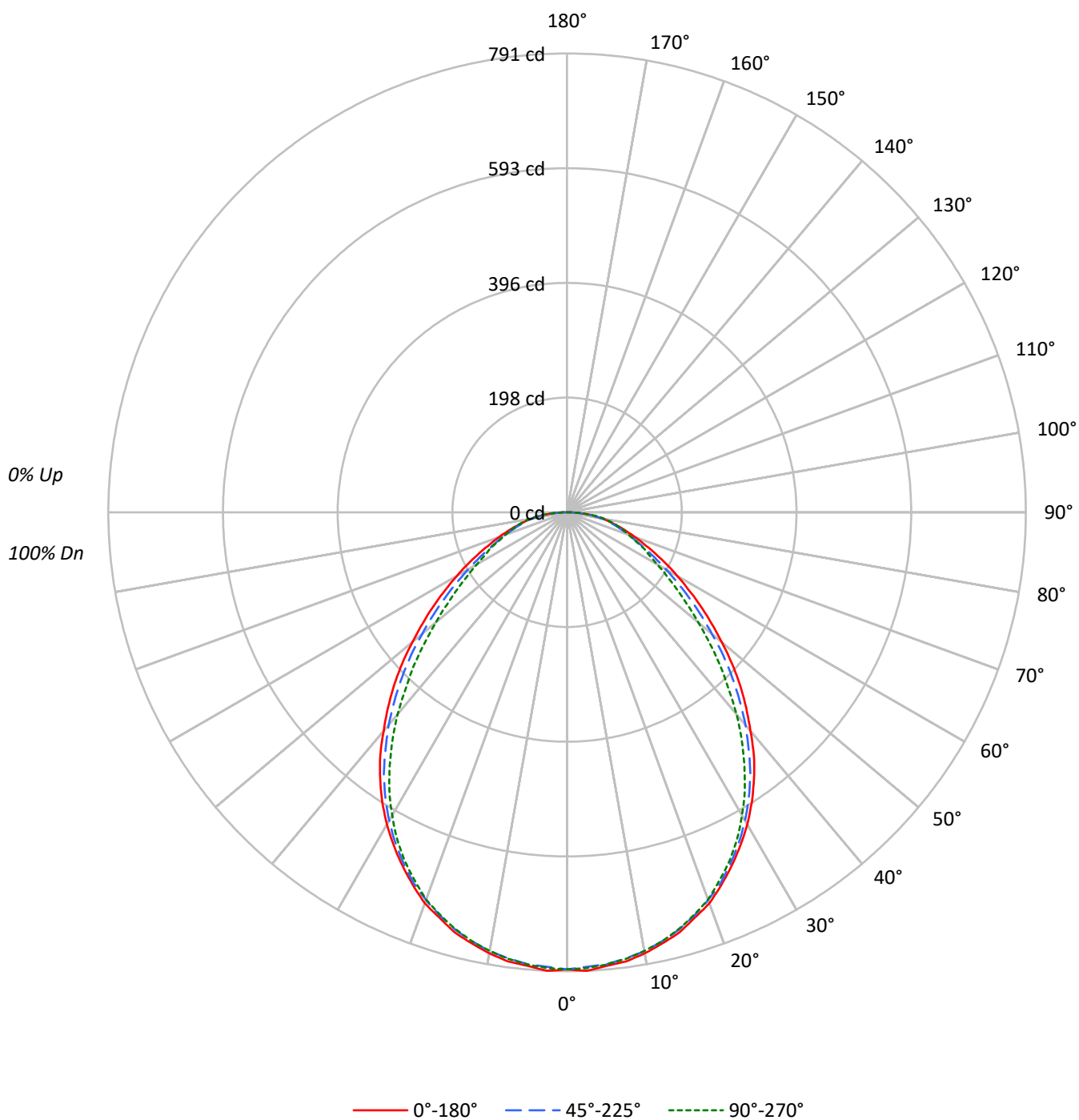
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2120	2120	2120
5°	2120	2112	2113
10°	2109	2099	2098
15°	2088	2075	2072
20°	2054	2037	2034
25°	1995	1982	1967
30°	1931	1907	1874
35°	1846	1810	1751
40°	1728	1680	1597
45°	1605	1533	1421
50°	1456	1365	1238
55°	1317	1206	1081
60°	1182	1057	964
65°	1061	944	923
70°	980	878	887
75°	936	881	932
80°	945	939	1015
85°	979	966	1078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	4.2
10°-20°	210.3	12.0
20°-30°	307.1	17.5
30°-40°	342.2	19.5
40°-50°	308.3	17.6
50°-60°	230.5	13.2
60°-70°	152.0	8.7
70°-80°	92.8	5.3
80°-90°	34.4	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°	591.7	33.8
0°-40°	933.9	53.3
0°-60°	1472.7	84.1
0°-90°	1752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1752.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	785	784	782	786	782	75
15°	749	747	745	749	744	211
25°	672	669	667	669	663	309
35°	562	557	551	541	533	350
45°	422	417	403	384	374	325
55°	281	276	257	236	230	251
65°	167	161	148	142	145	167
75°	90	88	85	88	90	96
85°	32	30	31	34	35	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	787.9	787.9	787.9	787.9	787.9
2.5°	791.1	787.5	784.3	789.1	786.3
5°	784.7	783.9	781.9	785.9	782.3
7.5°	780.7	777.9	775.5	780.3	776.3
10°	771.9	770.2	768.2	772.3	767.8
12.5°	761.0	759.4	757.4	762.2	757.4
15°	749.4	746.6	744.9	749.4	743.7
17.5°	732.5	731.3	728.9	733.3	727.7
20°	717.2	712.8	711.2	714.4	710.4
22.5°	695.2	691.9	691.5	693.5	686.7
25°	671.9	669.4	667.4	668.6	662.6
27.5°	647.4	644.1	641.7	641.3	634.9
30°	621.3	617.2	613.6	610.4	603.2
32.5°	592.7	587.9	583.1	577.9	570.3
35°	561.8	557.0	551.0	541.3	532.9
37.5°	529.3	523.7	514.0	502.8	494.4
40°	491.9	489.1	478.3	463.8	454.6
42.5°	457.0	453.8	440.1	424.1	411.6
45°	421.7	417.3	402.8	384.3	373.5
47.5°	385.5	381.1	365.0	342.2	332.5
50°	347.8	345.4	326.1	305.2	295.6
52.5°	313.2	310.4	290.8	269.9	261.0
55°	280.7	276.3	257.0	235.7	230.5
57.5°	248.2	243.4	225.3	207.2	203.6
60°	219.7	213.6	196.4	182.3	179.1
62.5°	192.8	185.9	171.5	160.6	159.0
65°	166.7	161.4	148.2	142.2	145.0
67.5°	144.2	138.9	129.3	126.9	126.1
70°	124.5	119.7	111.6	112.4	112.8
72.5°	106.4	103.6	97.6	99.6	101.2
75°	90.0	88.3	84.7	87.5	89.6
77.5°	75.1	73.9	72.3	74.7	77.9
80°	61.0	60.2	60.6	62.2	65.5
82.5°	47.0	45.4	46.6	49.8	51.8
85°	31.7	30.5	31.3	34.5	34.9
87.5°	14.9	14.9	14.5	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)