

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: P290693

Luminaire Tested: **14GR-LD5-20-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290693
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-L92765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1820.0 lumens
Efficiency: N/A
Efficacy: 115.8 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

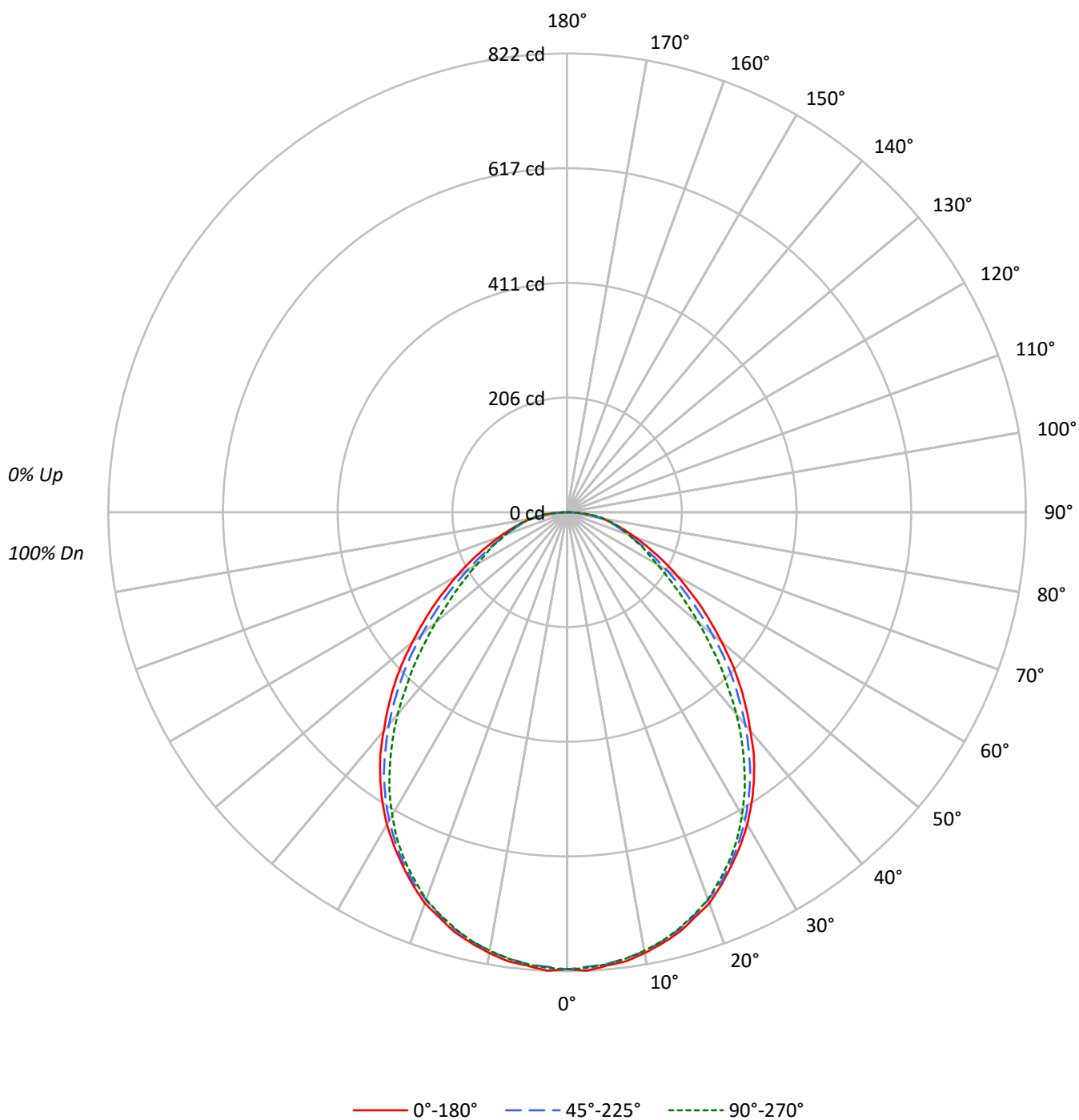
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2203	2203	2203
5°	2202	2194	2195
10°	2191	2181	2179
15°	2169	2156	2152
20°	2134	2116	2113
25°	2072	2059	2044
30°	2005	1981	1947
35°	1917	1880	1819
40°	1795	1746	1659
45°	1667	1592	1477
50°	1513	1418	1285
55°	1368	1253	1124
60°	1228	1098	1002
65°	1102	980	959
70°	1017	913	922
75°	971	915	967
80°	982	976	1054
85°	1019	1003	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	4.2
10°-20°	218.4	12.0
20°-30°	319.0	17.5
30°-40°	355.5	19.5
40°-50°	320.3	17.6
50°-60°	239.4	13.2
60°-70°	157.9	8.7
70°-80°	96.4	5.3
80°-90°	35.8	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°	614.7	33.8
0°-40°	970.2	53.3
0°-60°	1529.9	84.1
0°-90°	1820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	815	814	812	816	813	77
15°	778	776	774	778	773	219
25°	698	695	693	695	688	321
35°	584	579	572	562	554	364
45°	438	433	418	399	388	337
55°	292	287	267	245	240	261
65°	173	168	154	148	151	174
75°	93	92	88	91	93	100
85°	33	32	32	36	36	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.5	818.5	818.5	818.5	818.5
2.5°	821.8	818.1	814.7	819.8	816.8
5°	815.2	814.3	812.2	816.4	812.7
7.5°	811.0	808.1	805.6	810.6	806.4
10°	801.8	800.1	798.1	802.2	797.6
12.5°	790.5	788.9	786.8	791.8	786.8
15°	778.5	775.5	773.9	778.5	772.6
17.5°	760.9	759.7	757.2	761.8	755.9
20°	745.1	740.5	738.8	742.2	738.0
22.5°	722.1	718.8	718.4	720.5	713.4
25°	697.9	695.4	693.3	694.6	688.3
27.5°	672.5	669.2	666.6	666.2	659.6
30°	645.4	641.2	637.4	634.1	626.6
32.5°	615.8	610.7	605.7	600.3	592.4
35°	583.6	578.6	572.4	562.4	553.6
37.5°	549.8	544.0	534.0	522.3	513.5
40°	511.0	508.1	496.9	481.8	472.2
42.5°	474.7	471.4	457.2	440.5	427.6
45°	438.0	433.4	418.4	399.2	388.0
47.5°	400.5	395.9	379.2	355.4	345.4
50°	361.3	358.8	338.7	317.1	307.0
52.5°	325.4	322.5	302.0	280.3	271.2
55°	291.6	287.0	267.0	244.9	239.5
57.5°	257.8	252.8	234.0	215.3	211.5
60°	228.2	221.9	204.0	189.4	186.1
62.5°	200.2	193.2	178.1	166.9	165.2
65°	173.1	167.7	153.9	147.7	150.6
67.5°	149.8	144.3	134.3	131.8	131.0
70°	129.3	124.3	116.0	116.8	117.2
72.5°	110.6	107.6	101.4	103.5	105.1
75°	93.4	91.8	88.0	90.9	93.0
77.5°	78.0	76.8	75.1	77.6	80.9
80°	63.4	62.6	63.0	64.7	68.0
82.5°	48.8	47.1	48.4	51.7	53.8
85°	33.0	31.7	32.5	35.9	36.3
87.5°	15.4	15.4	15.0	17.5	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)