

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: P291363

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-36-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3732.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

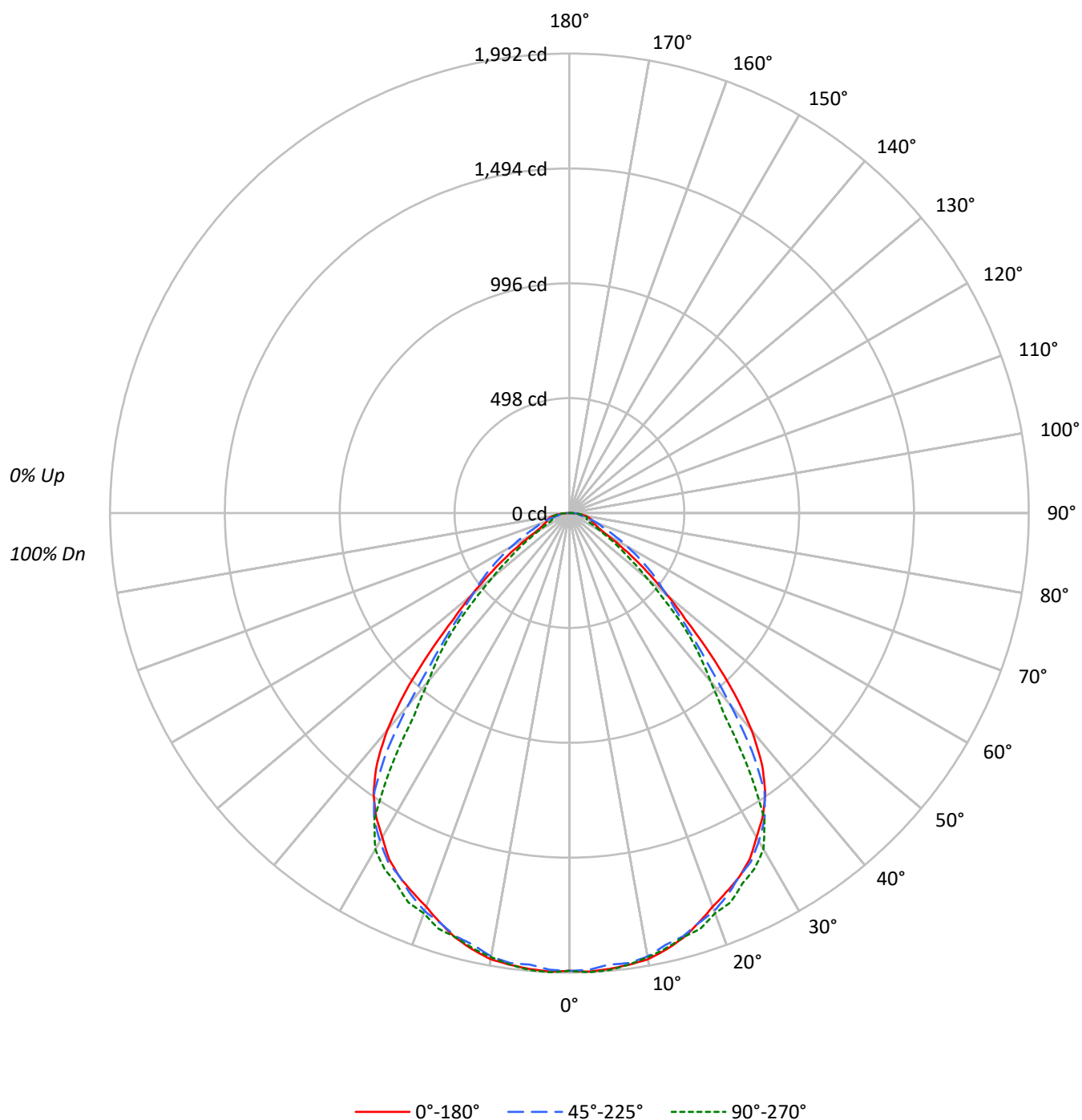
Input Watts (W): 29.946
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93			93
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71			77
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63			71
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57			65
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51			60
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46			55
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42			51
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38			48
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5358	5308	5370
10°	5367	5334	5343
15°	5312	5293	5305
20°	5201	5257	5287
25°	5170	5167	5266
30°	5044	5105	5230
35°	4864	4844	4451
40°	4318	3811	3337
45°	3277	2851	2699
50°	2325	2282	1831
55°	1591	1948	1258
60°	984	1554	841
65°	811	1196	609
70°	806	1042	625
75°	968	747	835
80°	1113	688	1046
85°	1056	1213	1186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.3	5.0
10°-20°	537.4	14.4
20°-30°	808.2	21.7
30°-40°	881.1	23.6
40°-50°	616.9	16.5
50°-60°	349.2	9.4
60°-70°	191.1	5.1
70°-80°	115.8	3.1
80°-90°	43.9	1.2
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°	1534.0	41.1
0°-40°	2415.0	64.7
0°-60°	3381.2	90.6
0°-90°	3732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3732.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1984	1980	1965	1988	1988	189
15°	1907	1902	1900	1927	1904	536
25°	1741	1744	1740	1780	1774	800
35°	1480	1474	1474	1399	1355	912
45°	861	899	749	740	709	669
55°	339	406	415	412	268	310
65°	127	209	188	238	96	131
75°	93	134	72	141	80	97
85°	34	56	39	48	38	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1984.5	1984.5	1984.5	1984.5	1984.5
2.5°	1989.7	1987.1	1981.1	1993.1	1992.2
5°	1983.7	1980.3	1964.9	1987.9	1987.9
7.5°	1975.1	1966.6	1967.4	1980.3	1974.3
10°	1964.0	1949.5	1952.1	1955.5	1955.5
12.5°	1938.4	1924.7	1917.9	1929.0	1932.4
15°	1906.8	1901.7	1900.0	1927.3	1904.2
17.5°	1862.4	1873.5	1863.2	1885.4	1888.9
20°	1816.2	1837.6	1835.9	1851.3	1846.1
22.5°	1778.6	1792.3	1792.3	1811.1	1826.5
25°	1741.1	1744.5	1740.2	1780.4	1773.5
27.5°	1692.4	1689.8	1703.5	1724.0	1737.6
30°	1623.2	1624.0	1642.8	1670.2	1683.0
32.5°	1559.9	1552.3	1575.3	1587.3	1573.6
35°	1480.5	1473.7	1474.5	1399.3	1354.9
37.5°	1372.0	1378.0	1299.4	1161.8	1103.8
40°	1229.3	1241.3	1085.0	982.4	950.0
42.5°	1056.8	1060.2	889.3	856.0	834.6
45°	861.1	898.7	749.2	739.8	709.1
47.5°	682.6	752.6	627.9	633.9	560.4
50°	555.3	625.3	545.0	547.6	437.4
52.5°	439.1	507.5	481.0	473.3	343.4
55°	339.2	405.8	415.2	411.8	268.2
57.5°	249.5	321.2	348.6	361.4	206.7
60°	182.8	262.3	288.8	314.4	156.3
62.5°	145.2	227.2	236.6	274.2	121.3
65°	127.3	209.3	187.9	237.5	95.7
67.5°	113.6	199.1	152.9	210.2	83.7
70°	102.5	179.4	132.4	187.9	79.4
72.5°	102.5	157.2	104.2	166.6	80.3
75°	93.1	134.1	71.8	141.0	80.3
77.5°	82.9	114.5	53.8	114.5	75.2
80°	71.8	89.7	44.4	88.0	67.5
82.5°	53.0	67.5	38.4	65.8	54.7
85°	34.2	55.5	39.3	47.8	38.4
87.5°	16.2	28.2	24.8	23.9	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)