

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: P291420

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291420
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-L82765-W2A1-U-6500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3715.0 lumens
Efficiency: N/A
Efficacy: 121.4 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

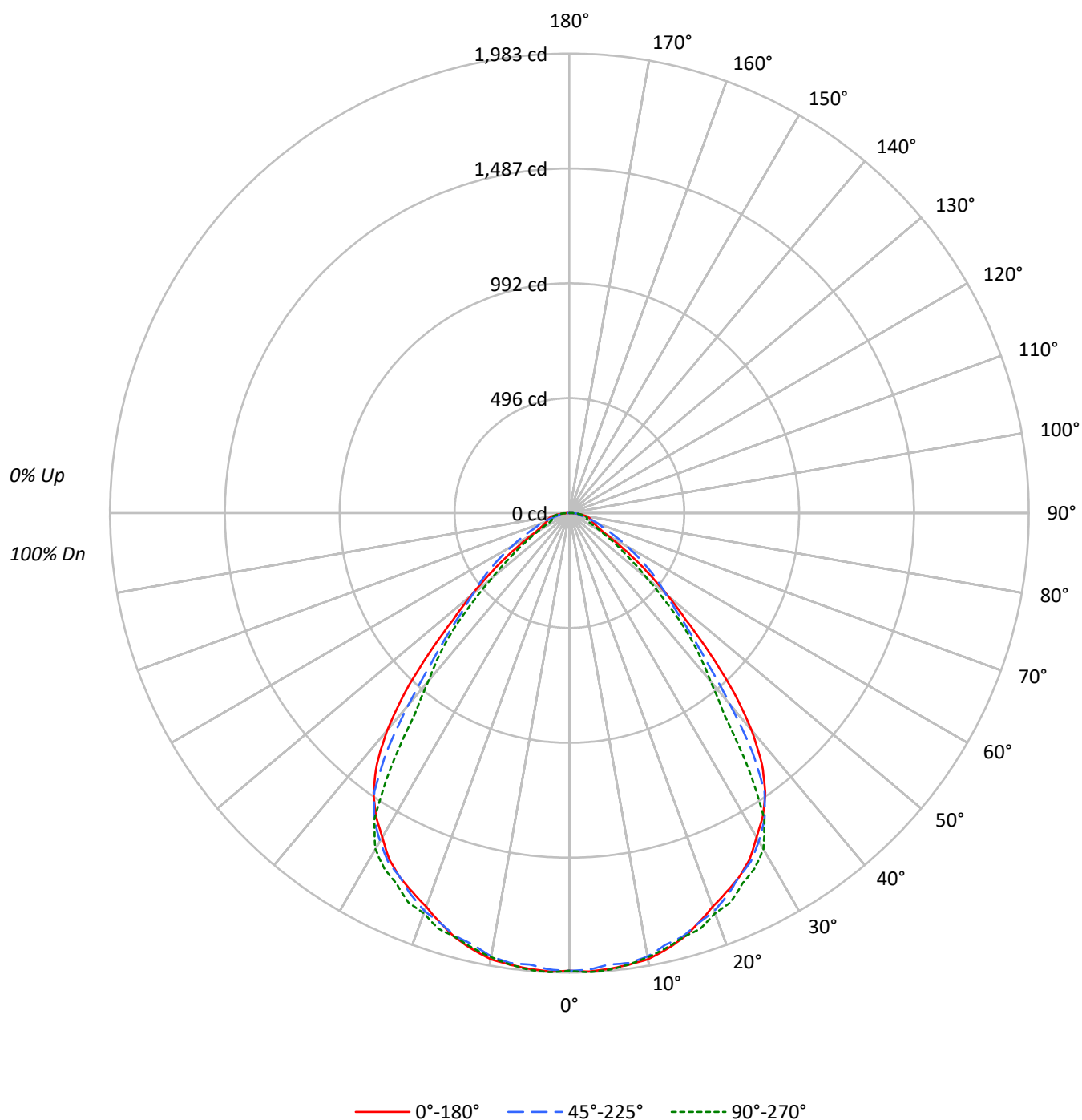
Input Watts (W): 30.597
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5316	5316	5316
5°	5334	5283	5346
10°	5342	5310	5319
15°	5288	5269	5281
20°	5178	5233	5263
25°	5146	5143	5242
30°	5021	5081	5206
35°	4842	4822	4431
40°	4299	3794	3322
45°	3262	2838	2686
50°	2314	2272	1823
55°	1584	1939	1253
60°	980	1547	837
65°	807	1191	606
70°	803	1037	622
75°	964	742	831
80°	1106	685	1041
85°	1050	1207	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.4	5.0
10°-20°	535.0	14.4
20°-30°	804.5	21.7
30°-40°	877.1	23.6
40°-50°	614.1	16.5
50°-60°	347.6	9.4
60°-70°	190.2	5.1
70°-80°	115.3	3.1
80°-90°	43.7	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°	1527.0	41.1
0°-40°	2404.0	64.7
0°-60°	3365.8	90.6
0°-90°	3715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3715.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1975	1971	1956	1979	1979	188
15°	1898	1893	1891	1918	1896	534
25°	1733	1736	1732	1772	1765	796
35°	1474	1467	1468	1393	1349	908
45°	857	895	746	736	706	666
55°	338	404	413	410	267	309
65°	127	208	187	236	95	130
75°	93	134	71	140	80	96
85°	34	55	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°	1975.5	1975.5	1975.5	1975.5	1975.5
2.5°	1980.6	1978.0	1972.1	1984.0	1983.1
5°	1974.6	1971.2	1955.9	1978.9	1978.9
7.5°	1966.1	1957.6	1958.5	1971.2	1965.3
10°	1955.1	1940.6	1943.2	1946.6	1946.6
12.5°	1929.6	1916.0	1909.2	1920.2	1923.6
15°	1898.1	1893.0	1891.3	1918.5	1895.6
17.5°	1853.9	1864.9	1854.7	1876.8	1880.2
20°	1808.0	1829.2	1827.5	1842.8	1837.7
22.5°	1770.5	1784.2	1784.2	1802.9	1818.2
25°	1733.1	1736.5	1732.3	1772.2	1765.4
27.5°	1684.7	1682.1	1695.7	1716.1	1729.7
30°	1615.8	1616.6	1635.3	1662.5	1675.3
32.5°	1552.8	1545.2	1568.1	1580.1	1566.4
35°	1473.8	1466.9	1467.8	1393.0	1348.7
37.5°	1365.8	1371.7	1293.5	1156.6	1098.7
40°	1223.7	1235.6	1080.0	978.0	945.7
42.5°	1052.0	1055.4	885.3	852.1	830.8
45°	857.2	894.6	745.8	736.5	705.8
47.5°	679.5	749.2	625.0	631.0	557.9
50°	552.8	622.5	542.6	545.1	435.4
52.5°	437.1	505.1	478.8	471.1	341.9
55°	337.6	403.9	413.3	409.9	267.0
57.5°	248.3	319.8	347.0	359.7	205.8
60°	182.0	261.1	287.4	312.9	155.6
62.5°	144.6	226.2	235.6	273.0	120.8
65°	126.7	208.3	187.1	236.4	95.2
67.5°	113.1	198.1	152.2	209.2	83.3
70°	102.0	178.6	131.8	187.1	79.1
72.5°	102.0	156.5	103.7	165.8	79.9
75°	92.7	133.5	71.4	140.3	79.9
77.5°	82.5	114.0	53.6	114.0	74.8
80°	71.4	89.3	44.2	87.6	67.2
82.5°	52.7	67.2	38.3	65.5	54.4
85°	34.0	55.3	39.1	47.6	38.3
87.5°	16.2	28.1	24.7	23.8	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)