

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: P291419

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291419
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-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3705.0 lumens
Efficiency: N/A
Efficacy: 123.0 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

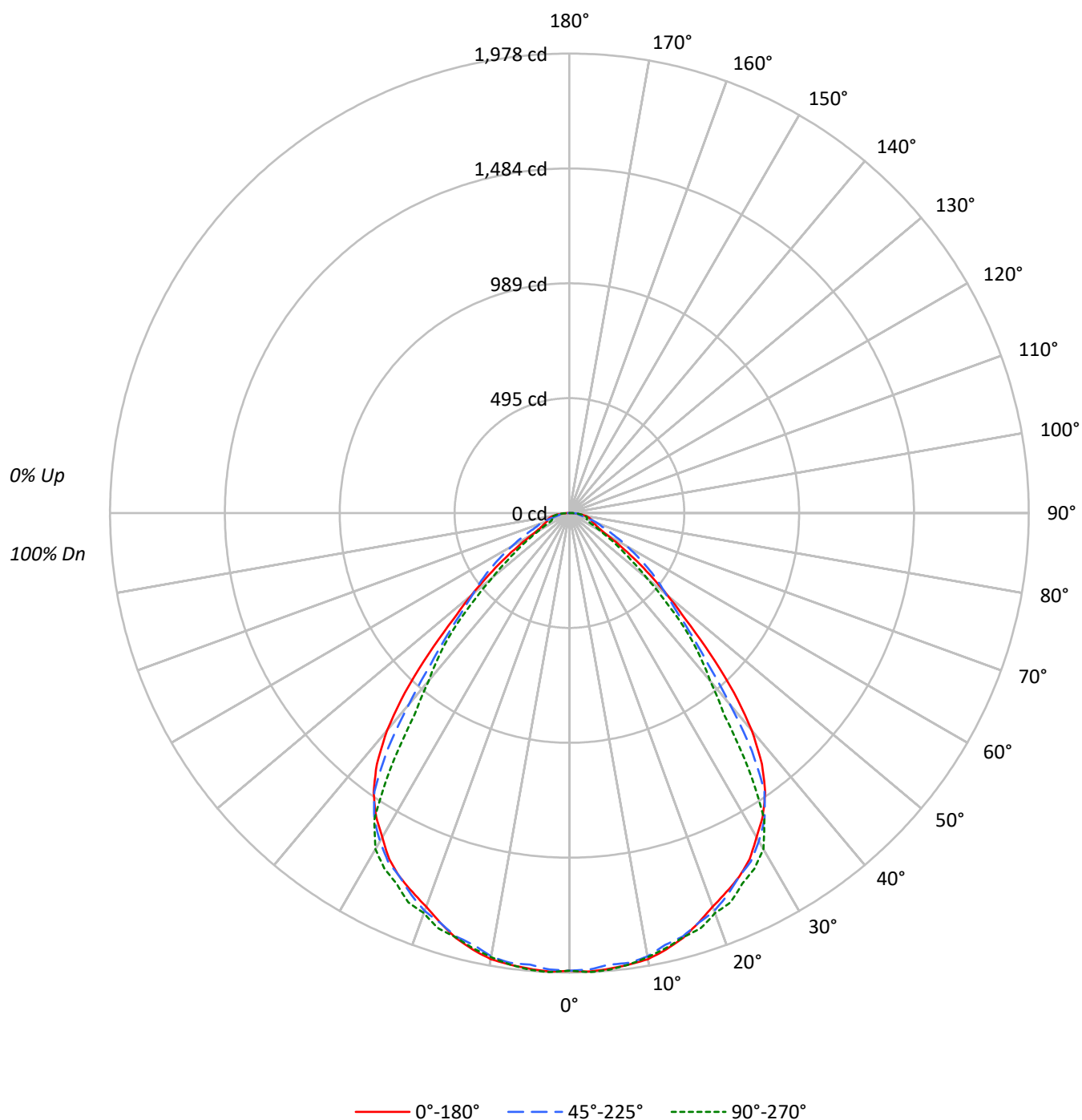
Input Watts (W): 30.132
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5302	5302	5302
5°	5320	5269	5331
10°	5328	5295	5305
15°	5274	5255	5267
20°	5164	5219	5249
25°	5132	5130	5228
30°	5007	5068	5192
35°	4828	4809	4419
40°	4287	3784	3313
45°	3253	2831	2679
50°	2308	2265	1818
55°	1580	1934	1249
60°	977	1543	835
65°	805	1188	605
70°	801	1035	621
75°	961	740	829
80°	1103	683	1038
85°	1047	1204	1179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	5.0
10°-20°	533.5	14.4
20°-30°	802.4	21.7
30°-40°	874.7	23.6
40°-50°	612.5	16.5
50°-60°	346.7	9.4
60°-70°	189.7	5.1
70°-80°	115.0	3.1
80°-90°	43.6	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°	1522.8	41.1
0°-40°	2397.5	64.7
0°-60°	3356.7	90.6
0°-90°	3705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1969	1966	1951	1974	1974	187
15°	1893	1888	1886	1913	1890	532
25°	1728	1732	1728	1768	1761	794
35°	1470	1463	1464	1389	1345	906
45°	855	892	744	734	704	664
55°	337	403	412	409	266	308
65°	126	208	187	236	95	130
75°	92	133	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°	1970.2	1970.2	1970.2	1970.2	1970.2
2.5°	1975.3	1972.7	1966.8	1978.7	1977.8
5°	1969.3	1965.9	1950.7	1973.6	1973.6
7.5°	1960.8	1952.4	1953.2	1965.9	1960.0
10°	1949.8	1935.4	1937.9	1941.3	1941.3
12.5°	1924.4	1910.8	1904.0	1915.0	1918.4
15°	1893.0	1887.9	1886.2	1913.4	1890.5
17.5°	1848.9	1859.9	1849.7	1871.8	1875.2
20°	1803.1	1824.3	1822.6	1837.9	1832.8
22.5°	1765.8	1779.3	1779.3	1798.0	1813.3
25°	1728.5	1731.9	1727.6	1767.5	1760.7
27.5°	1680.1	1677.6	1691.1	1711.5	1725.1
30°	1611.4	1612.3	1630.9	1658.1	1670.8
32.5°	1548.7	1541.0	1563.9	1575.8	1562.2
35°	1469.8	1463.0	1463.8	1389.2	1345.1
37.5°	1362.1	1368.0	1290.0	1153.4	1095.8
40°	1220.4	1232.3	1077.1	975.3	943.1
42.5°	1049.1	1052.5	882.9	849.8	828.6
45°	854.9	892.2	743.8	734.5	703.9
47.5°	677.6	747.2	623.4	629.3	556.4
50°	551.3	620.8	541.1	543.6	434.2
52.5°	435.9	503.8	477.5	469.9	340.9
55°	336.7	402.9	412.2	408.8	266.3
57.5°	247.7	318.9	346.0	358.8	205.2
60°	181.5	260.4	286.7	312.1	155.2
62.5°	144.2	225.6	234.9	272.2	120.4
65°	126.4	207.8	186.6	235.8	95.0
67.5°	112.8	197.6	151.8	208.6	83.1
70°	101.8	178.1	131.5	186.6	78.9
72.5°	101.8	156.1	103.5	165.4	79.7
75°	92.4	133.2	71.2	139.9	79.7
77.5°	82.3	113.6	53.4	113.6	74.6
80°	71.2	89.1	44.1	87.4	67.0
82.5°	52.6	67.0	38.2	65.3	54.3
85°	33.9	55.1	39.0	47.5	38.2
87.5°	16.1	28.0	24.6	23.7	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)