

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: P291398

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291398
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-LD5-28-A19/156-UNV-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2846.0 lumens
Efficiency: N/A
Efficacy: 125.9 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

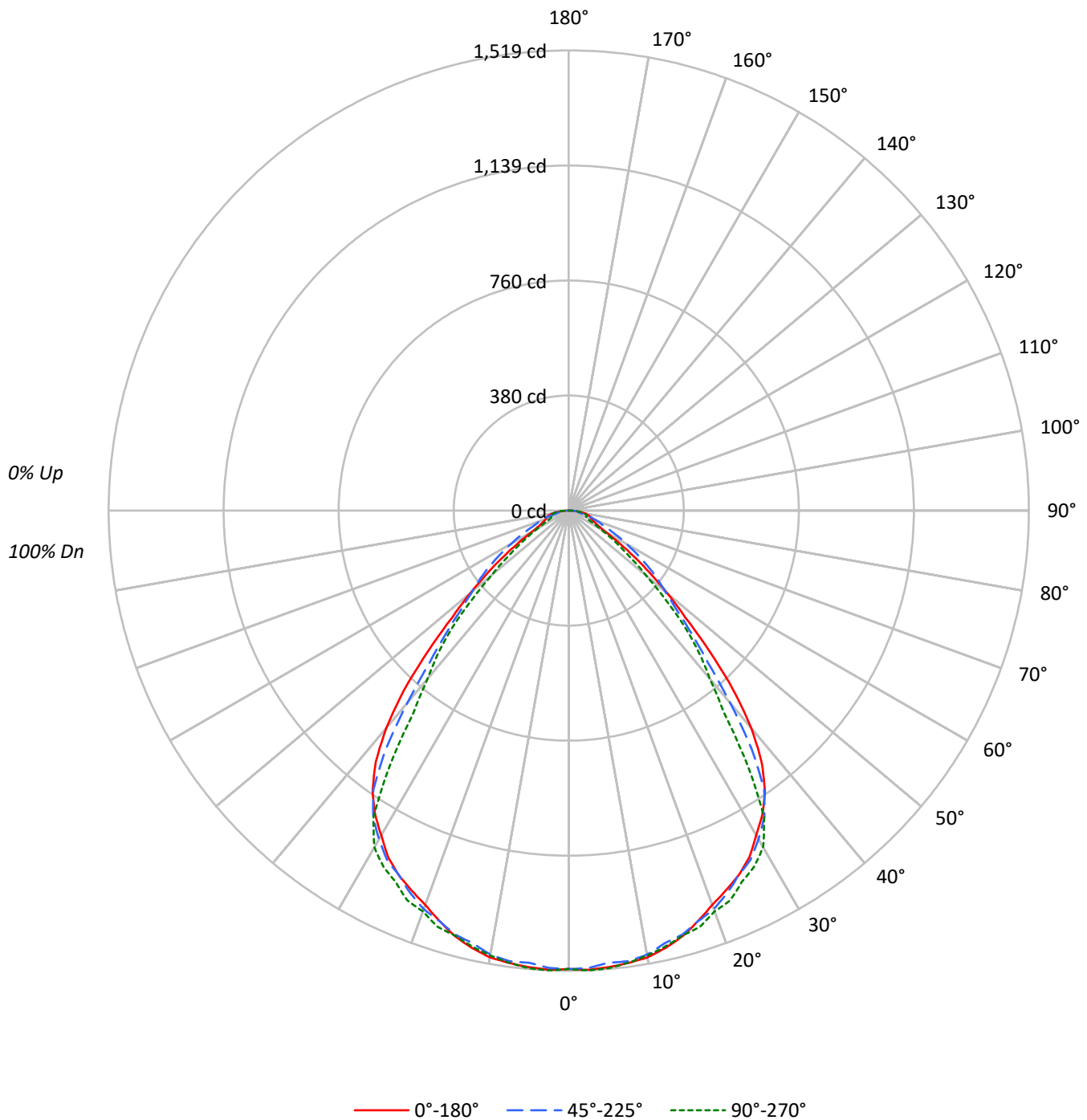
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4073	4073	4073
5°	4086	4048	4095
10°	4093	4068	4075
15°	4051	4036	4046
20°	3966	4009	4032
25°	3942	3940	4016
30°	3846	3893	3988
35°	3709	3694	3394
40°	3293	2907	2545
45°	2499	2174	2058
50°	1773	1740	1397
55°	1213	1485	960
60°	750	1185	642
65°	618	912	465
70°	615	795	477
75°	738	569	636
80°	848	525	798
85°	806	926	905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	5.0
10°-20°	409.8	14.4
20°-30°	616.3	21.7
30°-40°	671.9	23.6
40°-50°	470.5	16.5
50°-60°	266.3	9.4
60°-70°	145.7	5.1
70°-80°	88.3	3.1
80°-90°	33.5	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°	1169.8	41.1
0°-40°	1841.7	64.7
0°-60°	2578.5	90.6
0°-90°	2846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2846.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1513	1510	1498	1516	1516	144
15°	1454	1450	1449	1470	1452	409
25°	1328	1330	1327	1358	1352	610
35°	1129	1124	1124	1067	1033	696
45°	657	685	571	564	541	510
55°	259	310	317	314	205	236
65°	97	160	143	181	73	100
75°	71	102	55	108	61	74
85°	26	42	30	36	29	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1513.4	1513.4	1513.4	1513.4	1513.4
2.5°	1517.3	1515.3	1510.8	1519.9	1519.3
5°	1512.7	1510.1	1498.4	1516.0	1516.0
7.5°	1506.2	1499.7	1500.4	1510.1	1505.6
10°	1497.8	1486.7	1488.6	1491.2	1491.2
12.5°	1478.2	1467.8	1462.6	1471.0	1473.7
15°	1454.1	1450.2	1448.9	1469.7	1452.2
17.5°	1420.2	1428.7	1420.9	1437.8	1440.4
20°	1385.1	1401.3	1400.0	1411.8	1407.9
22.5°	1356.4	1366.8	1366.8	1381.1	1392.9
25°	1327.7	1330.3	1327.1	1357.7	1352.5
27.5°	1290.6	1288.6	1299.1	1314.7	1325.1
30°	1237.8	1238.5	1252.8	1273.6	1283.4
32.5°	1189.6	1183.7	1201.3	1210.5	1200.0
35°	1129.0	1123.8	1124.5	1067.1	1033.3
37.5°	1046.3	1050.8	990.9	886.0	841.7
40°	937.5	946.6	827.4	749.2	724.4
42.5°	805.9	808.5	678.2	652.8	636.5
45°	656.7	685.4	571.3	564.2	540.7
47.5°	520.5	574.0	478.8	483.4	427.4
50°	423.5	476.9	415.6	417.6	333.6
52.5°	334.9	387.0	366.8	360.9	261.9
55°	258.6	309.5	316.6	314.0	204.6
57.5°	190.2	245.0	265.8	275.6	157.7
60°	139.4	200.0	220.2	239.7	119.2
62.5°	110.8	173.3	180.5	209.1	92.5
65°	97.1	159.6	143.3	181.1	73.0
67.5°	86.6	151.8	116.6	160.3	63.8
70°	78.2	136.8	101.0	143.3	60.6
72.5°	78.2	119.9	79.5	127.0	61.2
75°	71.0	102.3	54.7	107.5	61.2
77.5°	63.2	87.3	41.0	87.3	57.3
80°	54.7	68.4	33.9	67.1	51.5
82.5°	40.4	51.5	29.3	50.2	41.7
85°	26.1	42.3	30.0	36.5	29.3
87.5°	12.4	21.5	18.9	18.2	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)