

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: P292704

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-A19/156-UNV-L92765-W2A1-U-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3360.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

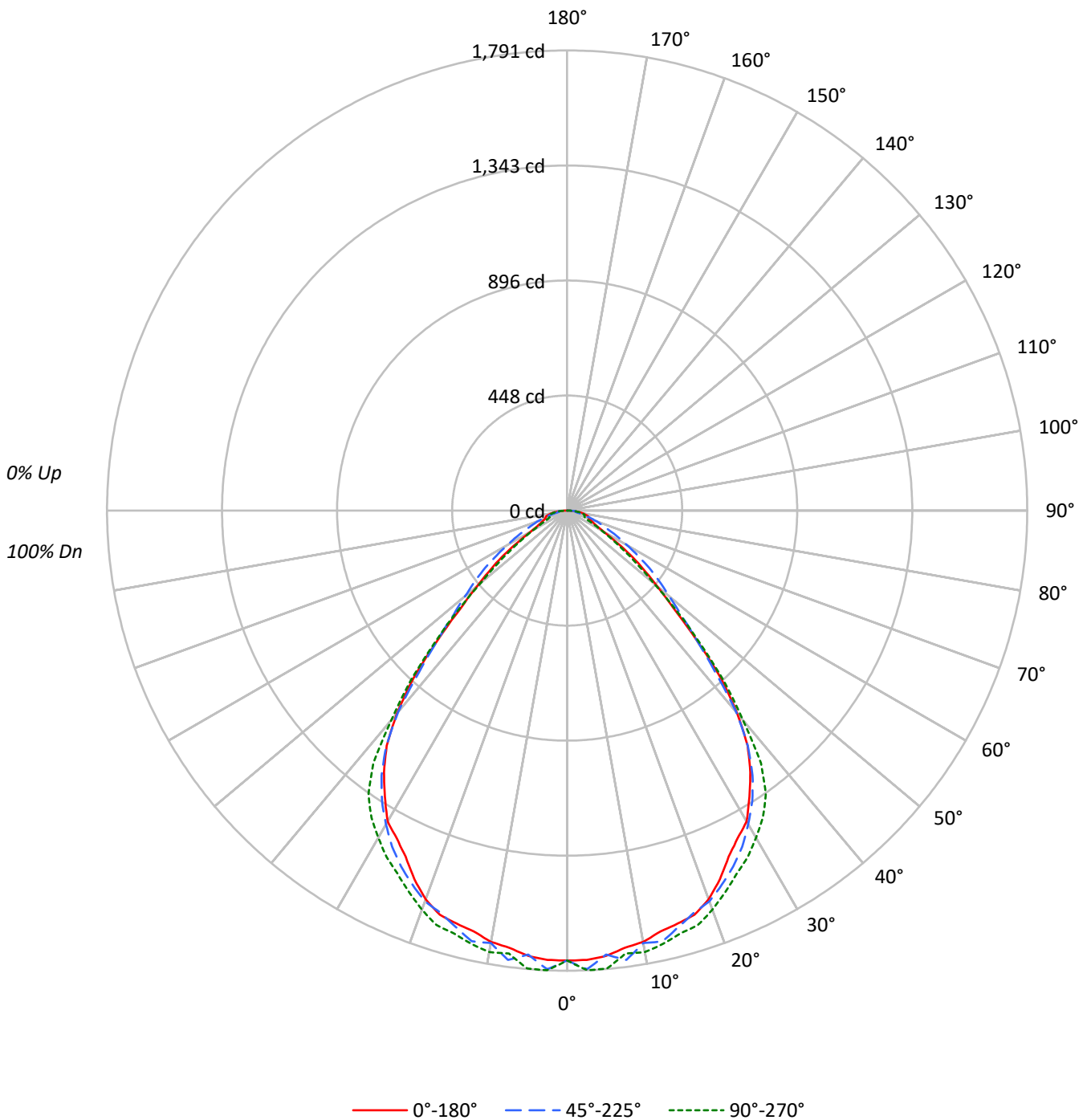
Input Watts (W): 35.061
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4712	4712	4712
5°	4700	4685	4833
10°	4657	4670	4768
15°	4636	4671	4746
20°	4611	4634	4734
25°	4414	4539	4633
30°	4342	4381	4568
35°	4083	4135	4429
40°	3618	3593	3735
45°	2702	2708	2784
50°	1902	2164	1843
55°	1404	1827	1259
60°	878	1445	822
65°	716	1144	574
70°	710	953	566
75°	881	700	733
80°	981	552	896
85°	979	1025	1003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.7	5.0
10°-20°	474.8	14.1
20°-30°	703.2	20.9
30°-40°	787.7	23.4
40°-50°	578.8	17.2
50°-60°	323.5	9.6
60°-70°	180.3	5.4
70°-80°	105.9	3.2
80°-90°	38.9	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°	1344.8	40.0
0°-40°	2132.5	63.5
0°-60°	3034.8	90.3
0°-90°	3360.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3360.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1751	1751	1751	1751	1751	
5°	1740	1772	1734	1770	1789	165
15°	1664	1674	1677	1702	1704	470
25°	1487	1499	1529	1550	1560	689
35°	1243	1244	1259	1316	1348	770
45°	710	768	712	762	732	555
55°	299	364	390	389	268	267
65°	112	200	180	230	90	116
75°	85	120	67	135	70	85
85°	32	47	33	43	32	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1751.1	1751.1	1751.1	1751.1	1751.1
2.5°	1750.3	1766.2	1786.8	1789.1	1790.7
5°	1740.1	1772.5	1734.5	1770.1	1789.1
7.5°	1716.3	1736.1	1763.8	1728.2	1738.5
10°	1704.4	1709.2	1709.2	1753.5	1744.8
12.5°	1677.5	1709.2	1717.1	1708.4	1727.4
15°	1664.1	1674.3	1676.7	1702.1	1703.6
17.5°	1649.0	1646.6	1641.1	1659.3	1691.8
20°	1610.2	1601.5	1618.1	1640.3	1653.0
22.5°	1553.2	1555.6	1575.4	1593.6	1607.8
25°	1486.7	1498.6	1528.7	1550.1	1560.4
27.5°	1436.9	1454.3	1474.9	1500.2	1520.8
30°	1397.3	1395.7	1409.9	1446.4	1470.1
32.5°	1320.5	1326.0	1341.1	1384.6	1417.9
35°	1242.9	1243.7	1258.7	1315.7	1348.2
37.5°	1153.4	1147.1	1155.8	1217.6	1238.9
40°	1029.9	1031.5	1022.8	1066.4	1063.2
42.5°	885.9	898.5	853.4	910.4	906.4
45°	710.1	767.9	711.7	762.4	731.5
47.5°	560.5	646.0	599.3	636.5	578.7
50°	454.4	542.3	517.0	533.6	440.2
52.5°	372.9	444.1	452.0	456.0	343.6
55°	299.2	364.2	389.5	388.7	268.4
57.5°	220.9	296.1	325.4	337.2	203.5
60°	163.1	246.2	268.4	294.5	152.8
62.5°	131.4	216.1	221.7	258.1	116.4
65°	112.4	199.5	179.7	230.4	90.2
67.5°	99.7	186.0	146.5	205.8	76.8
70°	90.2	165.5	121.1	184.5	72.0
72.5°	87.9	140.9	93.4	164.7	71.2
75°	84.7	119.5	67.3	135.4	70.5
77.5°	72.8	102.1	48.3	104.5	65.7
80°	63.3	81.5	35.6	78.4	57.8
82.5°	49.1	61.7	31.7	59.4	46.7
85°	31.7	46.7	33.2	42.7	32.5
87.5°	15.0	26.1	23.7	23.0	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)