

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: P292636

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292636
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-LD5-36-A19/156-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3028.0 lumens
Efficiency: N/A
Efficacy: 105.7 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

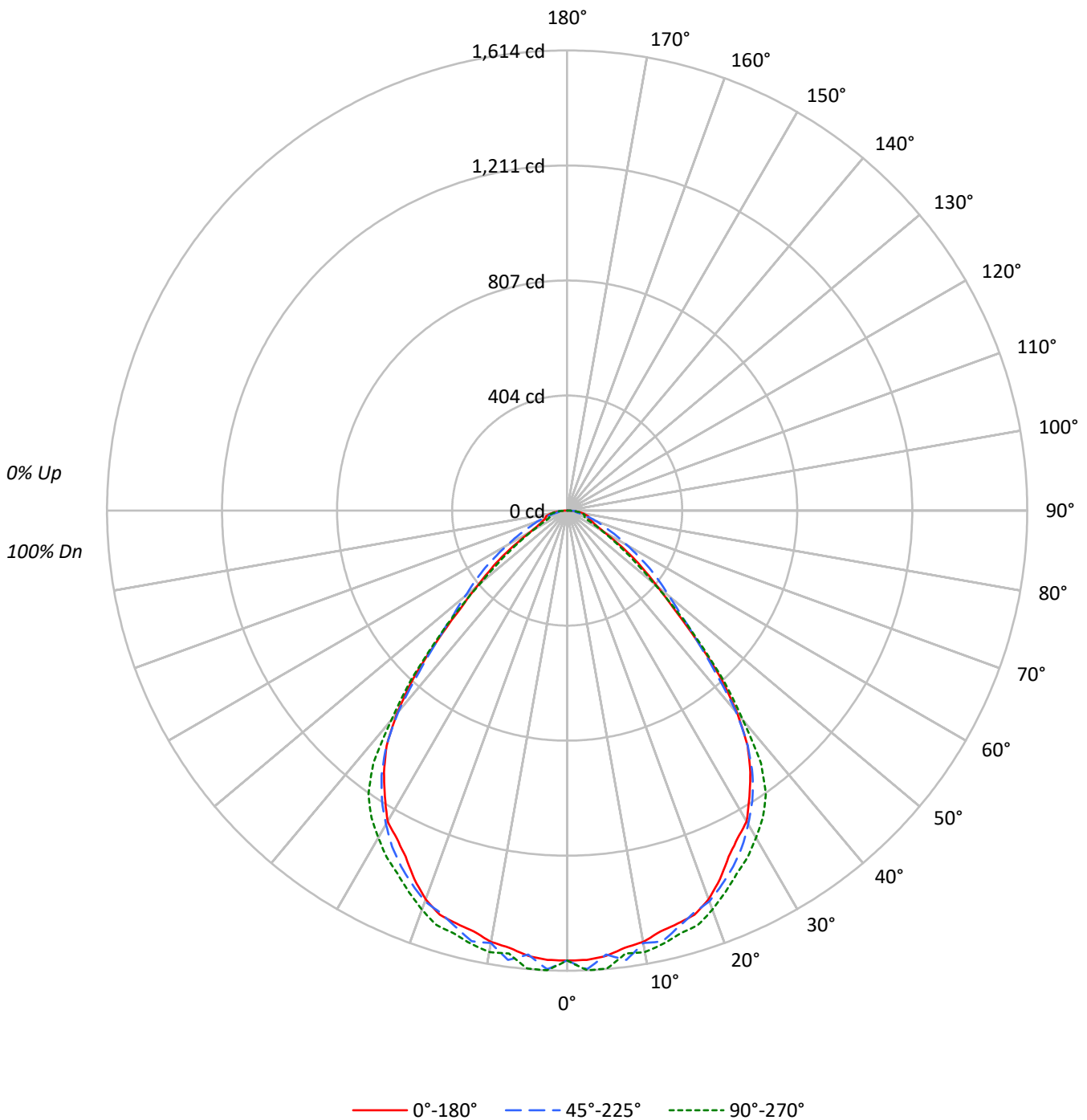
Input Watts (W): 28.644
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4247	4247	4247
5°	4236	4222	4356
10°	4197	4209	4297
15°	4178	4210	4277
20°	4155	4176	4266
25°	3978	4090	4175
30°	3913	3948	4117
35°	3680	3727	3991
40°	3261	3238	3366
45°	2435	2441	2509
50°	1714	1950	1661
55°	1265	1647	1135
60°	791	1302	741
65°	645	1031	518
70°	640	859	511
75°	793	630	660
80°	885	497	807
85°	880	926	905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.2	5.0
10°-20°	427.9	14.1
20°-30°	633.7	20.9
30°-40°	709.9	23.4
40°-50°	521.6	17.2
50°-60°	291.6	9.6
60°-70°	162.5	5.4
70°-80°	95.5	3.2
80°-90°	35.1	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°	1211.9	40.0
0°-40°	1921.8	63.5
0°-60°	2734.9	90.3
0°-90°	3028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3028.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1578	1578	1578	1578	1578	
5°	1568	1597	1563	1595	1612	148
15°	1500	1509	1511	1534	1535	424
25°	1340	1350	1378	1397	1406	621
35°	1120	1121	1134	1186	1215	694
45°	640	692	641	687	659	500
55°	270	328	351	350	242	241
65°	101	180	162	208	81	105
75°	76	108	61	122	64	77
85°	28	42	30	38	29	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1578.1	1578.1	1578.1	1578.1	1578.1
2.5°	1577.4	1591.7	1610.2	1612.4	1613.8
5°	1568.1	1597.4	1563.1	1595.2	1612.4
7.5°	1546.7	1564.6	1589.5	1557.4	1566.7
10°	1536.0	1540.3	1540.3	1580.2	1572.4
12.5°	1511.8	1540.3	1547.4	1539.6	1556.7
15°	1499.6	1508.9	1511.0	1533.9	1535.3
17.5°	1486.1	1483.9	1478.9	1495.4	1524.6
20°	1451.1	1443.3	1458.3	1478.2	1489.6
22.5°	1399.8	1401.9	1419.7	1436.1	1449.0
25°	1339.8	1350.5	1377.6	1396.9	1406.2
27.5°	1294.9	1310.6	1329.1	1352.0	1370.5
30°	1259.2	1257.8	1270.6	1303.4	1324.8
32.5°	1190.0	1195.0	1208.6	1247.8	1277.8
35°	1120.1	1120.8	1134.4	1185.7	1215.0
37.5°	1039.5	1033.8	1041.6	1097.3	1116.5
40°	928.2	929.6	921.8	961.0	958.1
42.5°	798.3	809.7	769.1	820.4	816.9
45°	639.9	692.0	641.4	687.0	659.2
47.5°	505.1	582.2	540.1	573.6	521.5
50°	409.5	488.7	465.9	480.9	396.7
52.5°	336.0	400.2	407.4	410.9	309.6
55°	269.7	328.2	351.0	350.3	241.9
57.5°	199.0	266.8	293.2	303.9	183.4
60°	147.0	221.9	241.9	265.4	137.7
62.5°	118.4	194.8	199.8	232.6	104.9
65°	101.3	179.8	161.9	207.6	81.3
67.5°	89.9	167.7	132.0	185.5	69.2
70°	81.3	149.1	109.2	166.2	64.9
72.5°	79.2	127.0	84.2	148.4	64.2
75°	76.3	107.7	60.6	122.0	63.5
77.5°	65.6	92.0	43.5	94.2	59.2
80°	57.1	73.5	32.1	70.6	52.1
82.5°	44.2	55.6	28.5	53.5	42.1
85°	28.5	42.1	30.0	38.5	29.3
87.5°	13.6	23.5	21.4	20.7	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)