

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: P292575

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292575
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-LD5-28-A19/156-UNV-L82765-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2959.0 lumens
Efficiency: N/A
Efficacy: 130.9 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

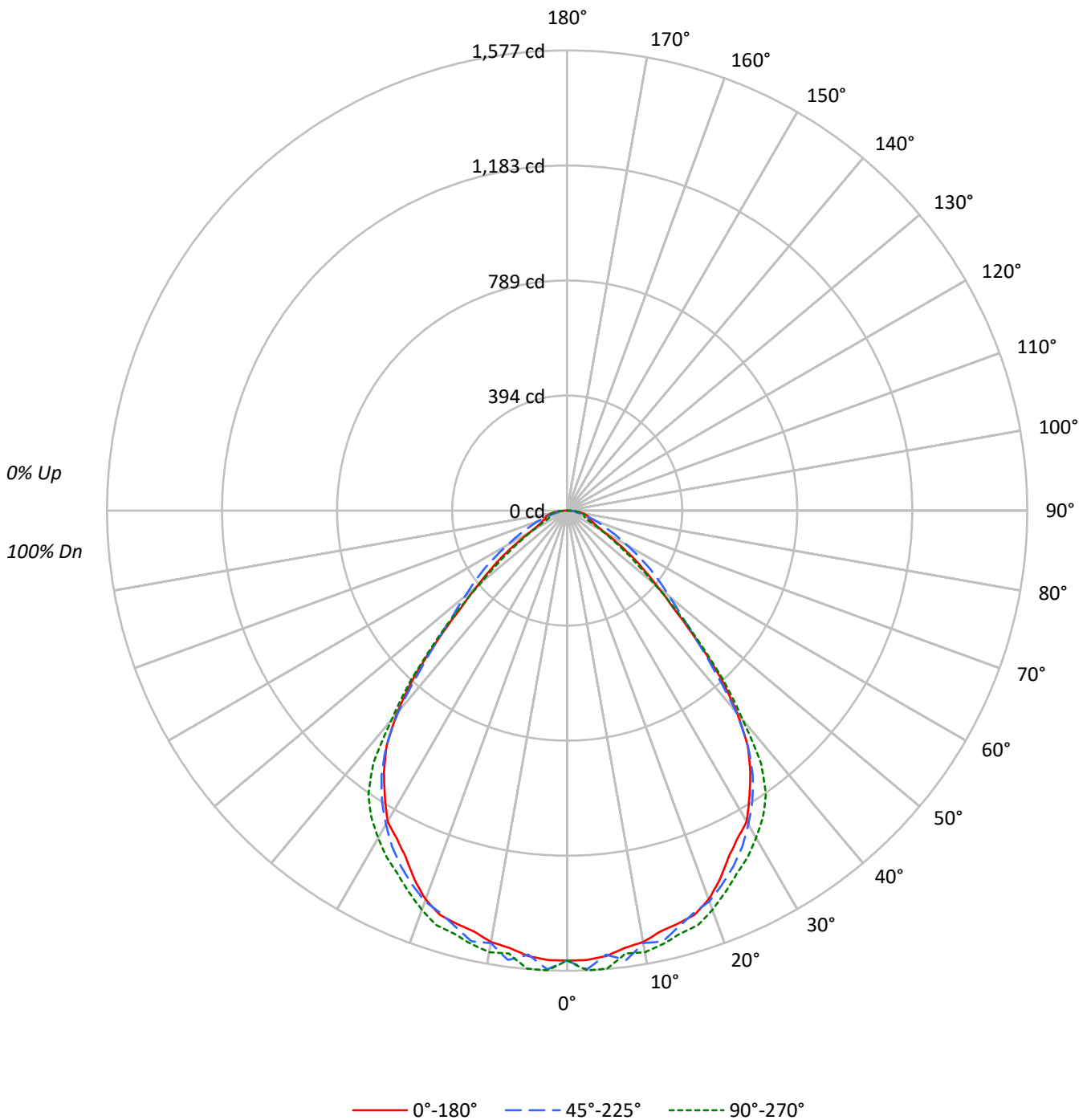
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4150	4150	4150
5°	4139	4126	4256
10°	4101	4113	4199
15°	4083	4114	4180
20°	4061	4081	4169
25°	3888	3997	4080
30°	3824	3858	4023
35°	3596	3642	3900
40°	3186	3164	3289
45°	2380	2385	2452
50°	1675	1906	1623
55°	1236	1609	1109
60°	773	1272	724
65°	630	1008	506
70°	625	840	499
75°	776	617	645
80°	865	487	789
85°	861	905	883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	5.0
10°-20°	418.1	14.1
20°-30°	619.3	20.9
30°-40°	693.7	23.4
40°-50°	509.7	17.2
50°-60°	284.9	9.6
60°-70°	158.8	5.4
70°-80°	93.3	3.2
80°-90°	34.3	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°	1184.3	40.0
0°-40°	1878.0	63.5
0°-60°	2672.6	90.3
0°-90°	2959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1532	1561	1528	1559	1576	145
15°	1466	1474	1477	1499	1500	414
25°	1309	1320	1346	1365	1374	607
35°	1095	1095	1108	1159	1187	678
45°	625	676	627	671	644	489
55°	264	321	343	342	236	235
65°	99	176	158	203	80	102
75°	75	105	59	119	62	75
85°	28	41	29	38	29	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.1	1542.1	1542.1	1542.1	1542.1
2.5°	1541.5	1555.4	1573.5	1575.6	1577.0
5°	1532.4	1561.0	1527.5	1558.9	1575.6
7.5°	1511.5	1528.9	1553.3	1521.9	1531.0
10°	1501.0	1505.2	1505.2	1544.2	1536.6
12.5°	1477.3	1505.2	1512.2	1504.5	1521.2
15°	1465.5	1474.5	1476.6	1498.9	1500.3
17.5°	1452.2	1450.1	1445.2	1461.3	1489.9
20°	1418.1	1410.4	1425.0	1444.5	1455.7
22.5°	1367.9	1369.9	1387.4	1403.4	1416.0
25°	1309.3	1319.8	1346.2	1365.1	1374.1
27.5°	1265.4	1280.7	1298.8	1321.1	1339.3
30°	1230.5	1229.1	1241.7	1273.7	1294.7
32.5°	1162.9	1167.8	1181.0	1219.4	1248.6
35°	1094.6	1095.3	1108.5	1158.7	1187.3
37.5°	1015.8	1010.2	1017.9	1072.3	1091.1
40°	907.0	908.4	900.7	939.1	936.3
42.5°	780.1	791.3	751.6	801.7	798.3
45°	625.4	676.3	626.8	671.4	644.2
47.5°	493.6	568.9	527.8	560.5	509.6
50°	400.2	477.6	455.3	469.9	387.6
52.5°	328.4	391.1	398.1	401.6	302.6
55°	263.5	320.7	343.0	342.3	236.3
57.5°	194.5	260.7	286.5	297.0	179.2
60°	143.6	216.8	236.3	259.3	134.6
62.5°	115.7	190.3	195.2	227.3	102.5
65°	99.0	175.7	158.3	202.9	79.5
67.5°	87.8	163.8	129.0	181.3	67.6
70°	79.5	145.7	106.7	162.4	63.4
72.5°	77.4	124.1	82.3	145.0	62.7
75°	74.6	105.3	59.3	119.2	62.0
77.5°	64.1	89.9	42.5	92.0	57.9
80°	55.8	71.8	31.4	69.0	50.9
82.5°	43.2	54.4	27.9	52.3	41.1
85°	27.9	41.1	29.3	37.6	28.6
87.5°	13.2	23.0	20.9	20.2	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)