

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: P292156

Luminaire Tested: **22GR-LD5-43-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-A-UNV-L83050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4341.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

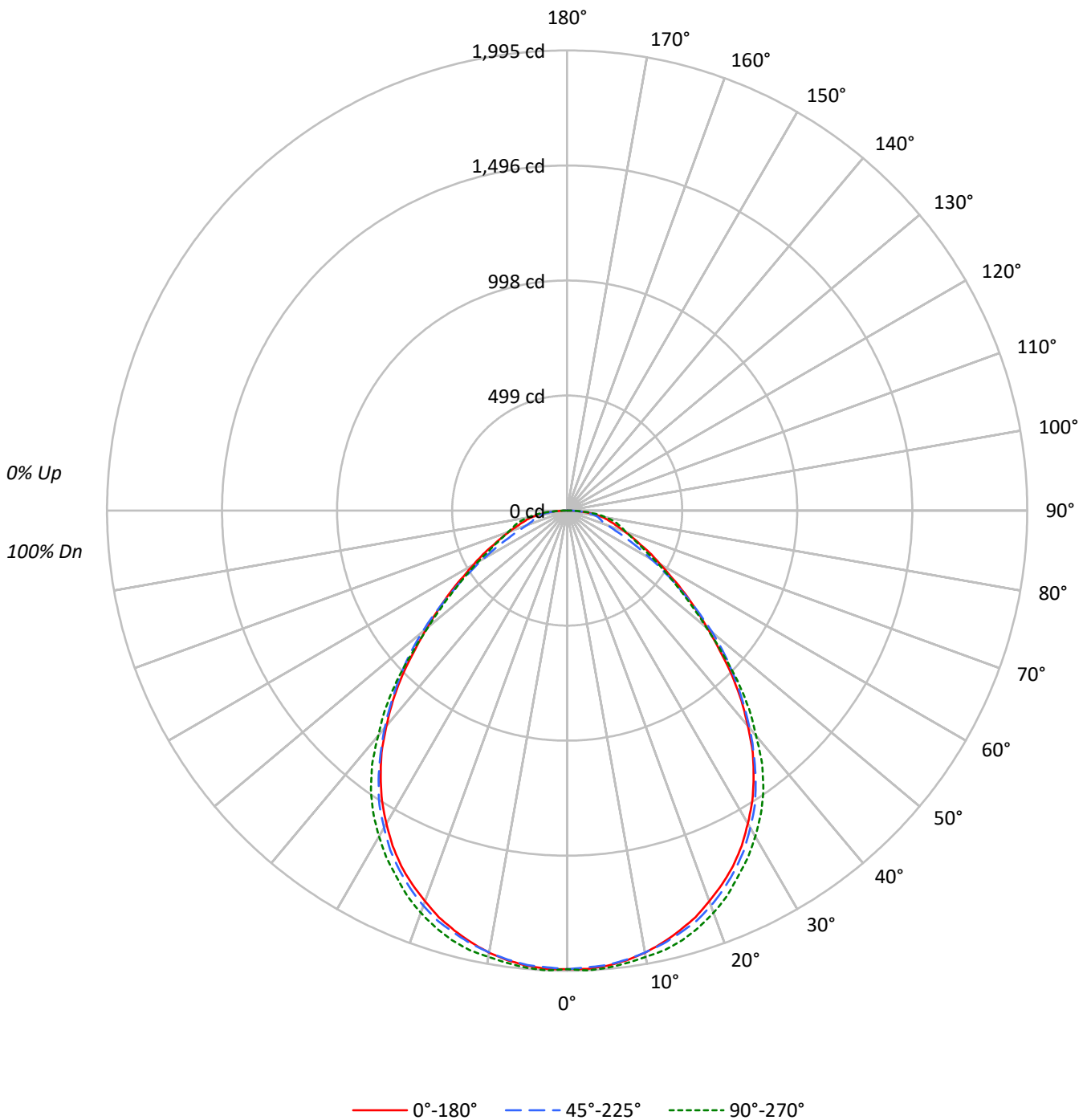
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292156

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L83050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P292156

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L83050-W2A1-U-3500K

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5350	5350	5350
5°	5351	5343	5376
10°	5319	5316	5369
15°	5251	5280	5372
20°	5161	5222	5314
25°	5051	5108	5201
30°	4868	4934	5069
35°	4629	4683	4871
40°	4280	4326	4478
45°	3844	3914	3975
50°	3324	3442	3290
55°	2900	2825	2787
60°	2512	2261	2414
65°	2245	1775	2167
70°	2083	1471	2138
75°	2079	1554	2374
80°	2301	1957	2676
85°	2402	2121	3026



TEST NUMBER: P292156

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L83050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.1	4.3
10°-20°	535.8	12.3
20°-30°	792.5	18.3
30°-40°	894.3	20.6
40°-50°	788.3	18.2
50°-60°	540.8	12.5
60°-70°	319.1	7.4
70°-80°	199.1	4.6
80°-90°	83.0	1.9
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°	1516.4	34.9
0°-40°	2410.6	55.5
0°-60°	3739.7	86.1
0°-90°	4341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4341.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1988	1988	1988	1988	1988	
5°	1981	1977	1978	1985	1990	188
15°	1885	1887	1895	1918	1928	531
25°	1701	1707	1720	1742	1752	781
35°	1409	1421	1425	1460	1483	878
45°	1010	1015	1028	1034	1044	776
55°	618	603	602	582	594	555
65°	353	310	279	322	340	355
75°	200	180	150	209	228	215
85°	78	73	69	90	98	84
90°	0	0	0	0	0	



TEST NUMBER: P292156

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L83050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1988.0	1988.0	1988.0	1988.0	1988.0
2.5°	1989.0	1984.0	1982.0	1990.0	1995.1
5°	1980.9	1976.9	1977.9	1985.0	1990.0
7.5°	1966.8	1963.8	1963.8	1973.9	1978.9
10°	1946.6	1945.6	1945.6	1957.7	1964.8
12.5°	1918.3	1919.3	1923.4	1939.5	1951.7
15°	1885.0	1887.0	1895.1	1918.3	1928.4
17.5°	1848.6	1848.6	1864.8	1883.0	1895.1
20°	1802.1	1805.2	1823.4	1843.6	1855.7
22.5°	1754.7	1759.7	1774.9	1798.1	1809.2
25°	1701.1	1707.2	1720.3	1742.5	1751.6
27.5°	1638.5	1646.6	1660.7	1676.9	1696.1
30°	1566.8	1578.9	1588.0	1610.2	1631.4
32.5°	1494.0	1505.2	1515.3	1538.5	1562.7
35°	1409.2	1421.3	1425.4	1459.7	1482.9
37.5°	1322.3	1327.4	1329.4	1363.7	1389.0
40°	1218.3	1228.4	1231.4	1258.7	1274.8
42.5°	1118.3	1122.3	1128.4	1148.6	1167.8
45°	1010.2	1015.2	1028.4	1034.4	1044.5
47.5°	897.0	912.2	927.3	908.1	909.2
50°	794.0	806.1	822.3	785.9	785.9
52.5°	702.1	708.1	709.1	678.8	684.9
55°	618.2	603.1	602.1	581.9	594.0
57.5°	534.4	514.2	507.1	501.0	515.2
60°	466.7	430.3	420.2	429.3	448.5
62.5°	411.1	364.7	345.5	368.7	385.9
65°	352.6	310.1	278.8	322.2	340.4
67.5°	307.1	266.7	226.3	287.9	301.0
70°	264.7	233.4	186.9	261.6	271.7
72.5°	230.3	206.1	161.6	236.4	248.5
75°	200.0	179.8	149.5	209.1	228.3
77.5°	175.8	153.5	139.4	180.8	204.1
80°	148.5	126.3	126.3	151.5	172.7
82.5°	117.2	99.0	102.0	123.2	138.4
85°	77.8	72.7	68.7	89.9	98.0
87.5°	39.4	40.4	36.4	46.5	47.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)