

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: P291826

Luminaire Tested: **22GR-LD5-43-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F1-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4423.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

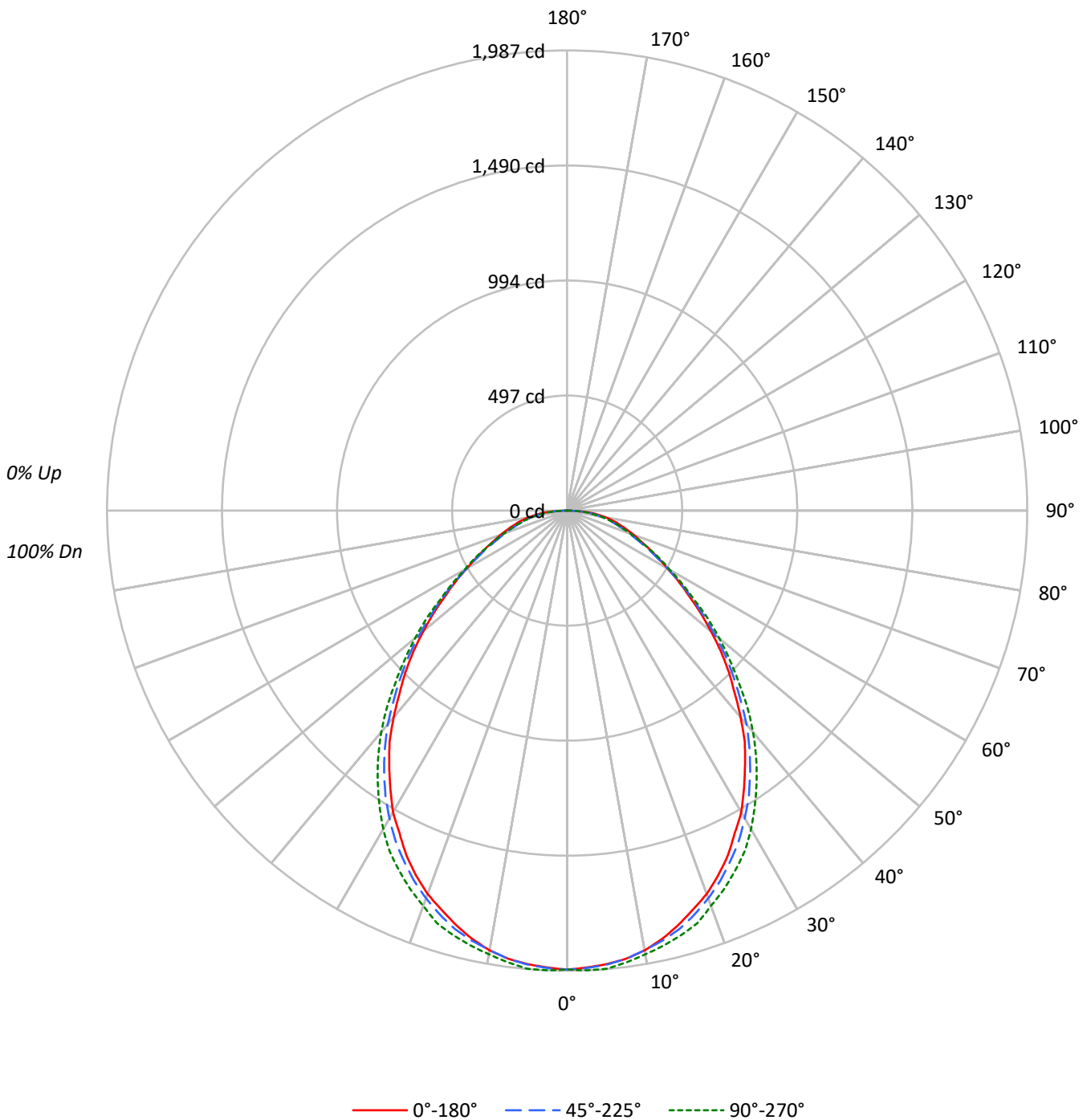
Input Watts (W): 35.805
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5334	5334	5334
5°	5310	5316	5365
10°	5269	5266	5316
15°	5162	5213	5290
20°	5045	5103	5202
25°	4877	4956	5095
30°	4672	4767	4934
35°	4399	4526	4686
40°	4093	4233	4386
45°	3758	3866	3986
50°	3390	3475	3585
55°	3007	3079	3132
60°	2695	2701	2756
65°	2484	2400	2484
70°	2398	2222	2286
75°	2440	2176	2218
80°	2630	2283	2283
85°	2918	2414	2384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.0	4.2
10°-20°	527.4	11.9
20°-30°	769.7	17.4
30°-40°	861.7	19.5
40°-50°	784.2	17.7
50°-60°	590.3	13.3
60°-70°	385.2	8.7
70°-80°	231.0	5.2
80°-90°	86.6	2.0
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°	1484.0	33.6
0°-40°	2345.7	53.0
0°-60°	3720.2	84.1
0°-90°	4423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4423.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1982	1982	1982	1982	1982	
5°	1966	1963	1968	1975	1986	187
15°	1853	1855	1871	1886	1899	522
25°	1643	1648	1669	1700	1716	754
35°	1339	1351	1378	1410	1426	837
45°	988	998	1016	1037	1047	760
55°	641	650	656	665	668	579
65°	390	386	377	383	390	390
75°	235	226	209	210	213	249
85°	94	91	78	74	77	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1982.0	1982.0	1982.0	1982.0	1982.0
2.5°	1974.9	1973.9	1977.0	1982.0	1987.1
5°	1965.8	1962.7	1967.8	1974.9	1986.1
7.5°	1951.6	1951.6	1951.6	1964.8	1966.8
10°	1928.2	1930.2	1927.2	1940.4	1945.5
12.5°	1894.7	1895.7	1901.8	1915.0	1924.1
15°	1853.0	1855.1	1871.3	1886.5	1898.7
17.5°	1806.3	1813.4	1828.6	1853.0	1868.3
20°	1761.6	1769.7	1781.9	1808.3	1816.4
22.5°	1704.7	1713.8	1729.1	1752.4	1769.7
25°	1642.7	1647.8	1669.1	1699.6	1715.9
27.5°	1568.6	1579.7	1606.2	1637.6	1660.0
30°	1503.5	1509.6	1534.0	1570.6	1587.9
32.5°	1421.3	1439.5	1459.9	1492.4	1508.6
35°	1339.0	1351.2	1377.6	1410.1	1426.3
37.5°	1259.7	1266.8	1293.3	1320.7	1341.0
40°	1165.2	1178.5	1204.9	1234.3	1248.6
42.5°	1070.8	1090.1	1107.3	1136.8	1152.0
45°	987.5	997.6	1015.9	1037.2	1047.4
47.5°	900.1	905.2	926.5	939.7	950.9
50°	809.7	815.8	830.0	843.2	856.4
52.5°	726.4	731.5	740.6	752.8	766.0
55°	641.0	650.2	656.3	665.4	667.5
57.5°	572.0	570.9	575.0	582.1	589.2
60°	500.8	502.9	501.9	509.0	512.0
62.5°	441.9	440.9	434.8	445.0	453.1
65°	390.1	386.0	376.9	383.0	390.1
67.5°	342.4	340.3	325.1	330.2	336.3
70°	304.8	297.7	282.4	285.5	290.6
72.5°	268.2	260.1	244.8	245.9	248.9
75°	234.7	226.5	209.3	210.3	213.3
77.5°	203.2	193.0	177.8	175.8	177.8
80°	169.7	160.5	147.3	141.2	147.3
82.5°	135.1	130.0	114.8	108.7	110.7
85°	94.5	91.4	78.2	74.2	77.2
87.5°	43.7	46.7	39.6	36.6	37.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)