

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: P293000

Luminaire Tested: **24GR-LD5-56-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293000
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5320.0 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

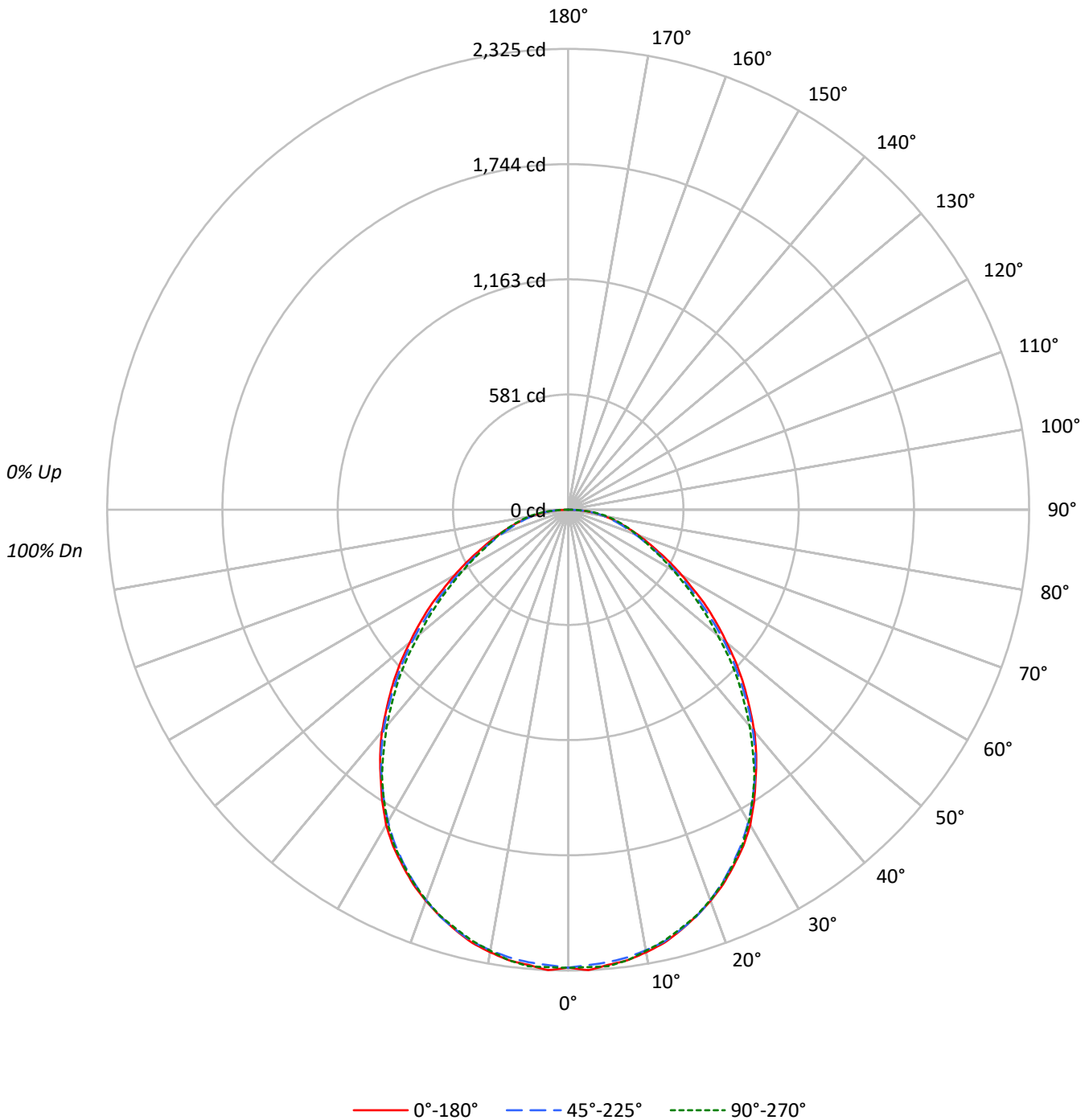
Input Watts (W): 38.688
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293000

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P293000

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-3000K

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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3109	3109	3109
5°	3114	3096	3123
10°	3097	3084	3087
15°	3059	3055	3048
20°	3007	3001	3001
25°	2937	2921	2927
30°	2852	2823	2832
35°	2709	2696	2689
40°	2565	2542	2498
45°	2384	2343	2297
50°	2184	2136	2056
55°	1995	1905	1841
60°	1778	1692	1648
65°	1600	1516	1495
70°	1485	1394	1450
75°	1420	1358	1472
80°	1420	1420	1573
85°	1474	1491	1660



TEST NUMBER: P293000

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	4.1
10°-20°	617.6	11.6
20°-30°	906.4	17.0
30°-40°	1024.8	19.3
40°-50°	947.1	17.8
50°-60°	729.7	13.7
60°-70°	483.2	9.1
70°-80°	287.6	5.4
80°-90°	105.4	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°	1742.3	32.7
0°-40°	2767.0	52.0
0°-60°	4443.8	83.5
0°-90°	5320.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5320.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2311	2311	2311	2311	2311	
5°	2305	2305	2292	2293	2312	219
15°	2196	2191	2194	2192	2188	619
25°	1978	1973	1967	1965	1972	911
35°	1649	1647	1642	1634	1637	1032
45°	1253	1244	1231	1209	1207	965
55°	850	833	812	790	785	759
65°	503	495	476	472	470	504
75°	273	267	261	273	283	291
85°	96	90	97	106	108	101
90°	0	0	0	0	0	



TEST NUMBER: P293000

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2310.9	2310.9	2310.9	2310.9	2310.9
2.5°	2325.1	2313.1	2299.9	2299.9	2309.8
5°	2305.4	2305.4	2292.2	2293.3	2312.0
7.5°	2293.3	2286.7	2278.0	2278.0	2292.2
10°	2267.0	2261.5	2257.1	2254.9	2259.3
12.5°	2238.5	2229.7	2233.0	2229.7	2228.6
15°	2195.7	2191.3	2193.5	2192.4	2188.0
17.5°	2149.6	2147.4	2151.8	2144.1	2147.4
20°	2100.2	2093.6	2095.8	2091.4	2095.8
22.5°	2044.2	2039.9	2034.4	2028.9	2037.7
25°	1978.4	1972.9	1967.4	1965.2	1971.8
27.5°	1912.6	1903.8	1896.1	1893.9	1903.8
30°	1835.8	1825.9	1817.1	1814.9	1822.6
32.5°	1744.7	1742.5	1731.5	1727.1	1730.4
35°	1649.2	1647.0	1641.5	1633.9	1637.1
37.5°	1558.1	1557.0	1549.4	1536.2	1527.4
40°	1460.5	1452.8	1447.3	1428.7	1422.1
42.5°	1353.0	1350.8	1340.9	1320.0	1312.4
45°	1253.1	1244.3	1231.2	1209.2	1207.0
47.5°	1150.0	1137.9	1125.8	1098.4	1097.3
50°	1043.5	1034.7	1020.5	993.0	982.1
52.5°	944.8	932.7	912.9	886.6	881.1
55°	850.4	832.8	812.0	790.0	784.6
57.5°	749.4	741.8	716.5	699.0	692.4
60°	660.6	654.0	628.7	612.3	612.3
62.5°	580.5	570.6	548.6	537.7	537.7
65°	502.6	494.9	476.2	471.8	469.6
67.5°	435.6	425.7	412.6	411.5	417.0
70°	377.5	365.4	354.4	365.4	368.7
72.5°	322.6	314.9	305.0	319.3	325.9
75°	273.2	266.6	261.2	273.2	283.1
77.5°	228.2	221.7	221.7	234.8	243.6
80°	183.2	178.9	183.2	194.2	203.0
82.5°	140.5	137.2	142.6	153.6	159.1
85°	95.5	90.0	96.6	106.4	107.5
87.5°	45.0	43.9	48.3	54.9	53.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)