

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: P293023

Luminaire Tested: **24GR-LD5-72-F1-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293023
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-LD5-72-F1-UNV-L82765-W2A1-U-5500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7518.0 lumens
Efficiency: N/A
Efficacy: 139.1 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

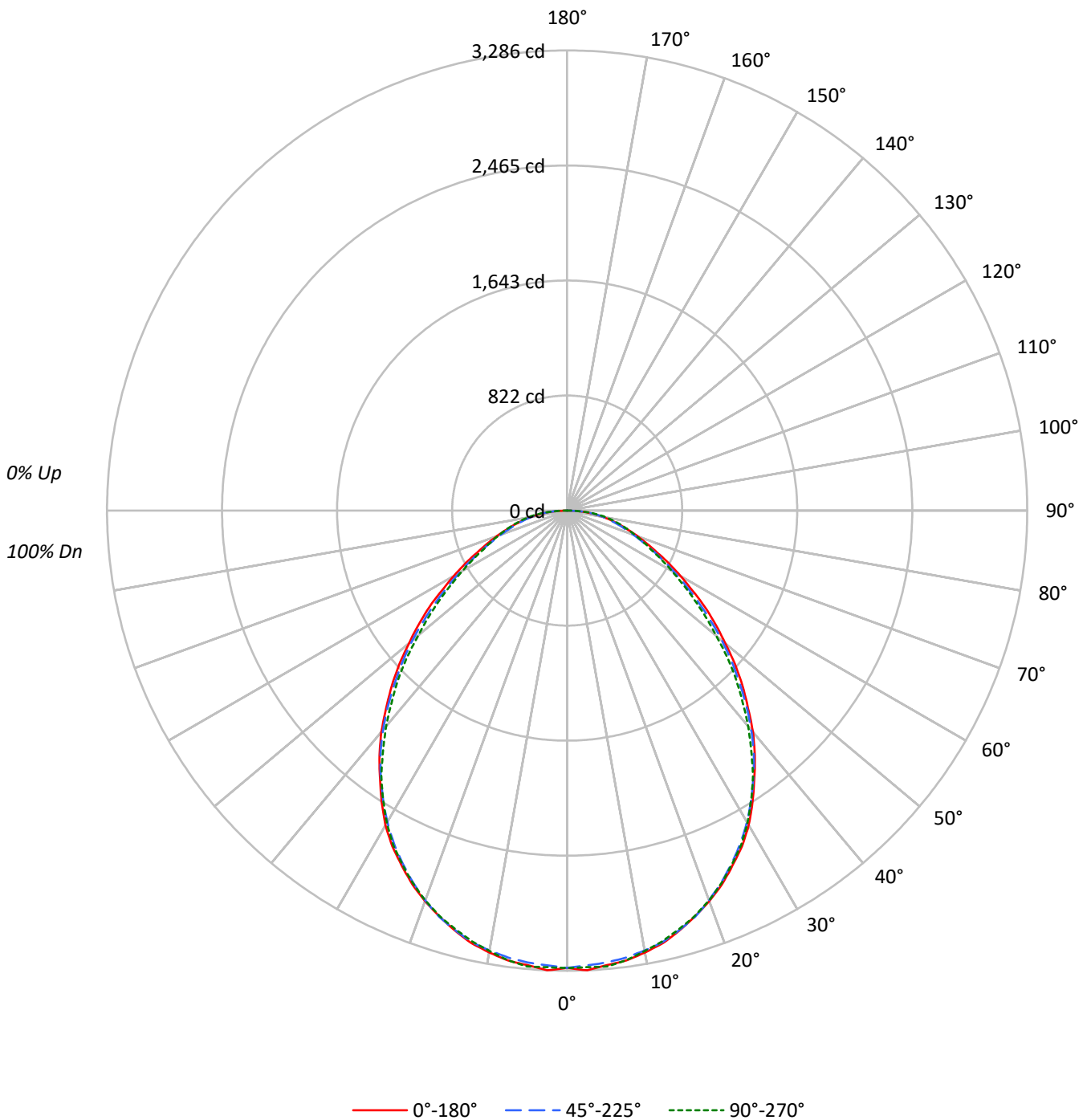
Input Watts (W): 54.033
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293023

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P293023

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-5500K

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°	4394	4394	4394
5°	4400	4375	4413
10°	4377	4358	4362
15°	4322	4318	4307
20°	4250	4241	4241
25°	4151	4128	4137
30°	4030	3990	4002
35°	3828	3810	3800
40°	3625	3592	3530
45°	3369	3311	3246
50°	3087	3019	2905
55°	2819	2692	2601
60°	2512	2391	2329
65°	2261	2143	2113
70°	2098	1971	2050
75°	2007	1919	2080
80°	2007	2007	2223
85°	2083	2107	2347



TEST NUMBER: P293023

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.4	4.1
10°-20°	872.8	11.6
20°-30°	1280.9	17.0
30°-40°	1448.2	19.3
40°-50°	1338.4	17.8
50°-60°	1031.2	13.7
60°-70°	682.8	9.1
70°-80°	406.5	5.4
80°-90°	148.9	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°	2462.1	32.7
0°-40°	3910.2	52.0
0°-60°	6279.8	83.5
0°-90°	7518.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7518.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3266	3266	3266	3266	3266	
5°	3258	3258	3239	3241	3267	310
15°	3103	3097	3100	3098	3092	875
25°	2796	2788	2780	2777	2786	1287
35°	2331	2328	2320	2309	2314	1458
45°	1771	1758	1740	1709	1706	1364
55°	1202	1177	1148	1116	1109	1072
65°	710	699	673	667	664	712
75°	386	377	369	386	400	412
85°	135	127	136	150	152	143
90°	0	0	0	0	0	



TEST NUMBER: P293023

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3265.6	3265.6	3265.6	3265.6	3265.6
2.5°	3285.8	3268.7	3250.1	3250.1	3264.1
5°	3257.9	3257.9	3239.3	3240.8	3267.2
7.5°	3240.8	3231.5	3219.1	3219.1	3239.3
10°	3203.6	3195.9	3189.7	3186.6	3192.8
12.5°	3163.3	3150.9	3155.5	3150.9	3149.3
15°	3102.8	3096.6	3099.7	3098.2	3092.0
17.5°	3037.7	3034.6	3040.8	3029.9	3034.6
20°	2967.9	2958.6	2961.7	2955.5	2961.7
22.5°	2888.8	2882.6	2874.9	2867.1	2879.5
25°	2795.8	2788.0	2780.3	2777.2	2786.5
27.5°	2702.8	2690.4	2679.5	2676.4	2690.4
30°	2594.2	2580.3	2567.9	2564.8	2575.6
32.5°	2465.5	2462.4	2446.9	2440.7	2445.4
35°	2330.6	2327.5	2319.8	2308.9	2313.6
37.5°	2201.9	2200.4	2189.5	2170.9	2158.5
40°	2063.9	2053.0	2045.3	2018.9	2009.6
42.5°	1911.9	1908.8	1894.9	1865.4	1854.6
45°	1770.8	1758.4	1739.8	1708.8	1705.7
47.5°	1625.1	1608.0	1591.0	1552.2	1550.6
50°	1474.7	1462.3	1442.1	1403.3	1387.8
52.5°	1335.1	1318.0	1290.1	1252.9	1245.2
55°	1201.7	1176.9	1147.5	1116.5	1108.7
57.5°	1059.1	1048.2	1012.6	987.8	978.5
60°	933.5	924.2	888.5	865.3	865.3
62.5°	820.3	806.3	775.3	759.8	759.8
65°	710.2	699.3	673.0	666.8	663.7
67.5°	615.6	601.6	583.0	581.5	589.2
70°	533.4	516.4	500.9	516.4	521.0
72.5°	455.9	445.0	431.1	451.2	460.5
75°	386.1	376.8	369.1	386.1	400.1
77.5°	322.5	313.2	313.2	331.8	344.2
80°	259.0	252.8	259.0	274.5	286.9
82.5°	198.5	193.8	201.6	217.1	224.8
85°	134.9	127.2	136.5	150.4	152.0
87.5°	63.6	62.0	68.2	77.5	76.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)