

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: P293019

Luminaire Tested: **24GR-LD5-72-F1-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293019
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7061.0 lumens
Efficiency: N/A
Efficacy: 133.7 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

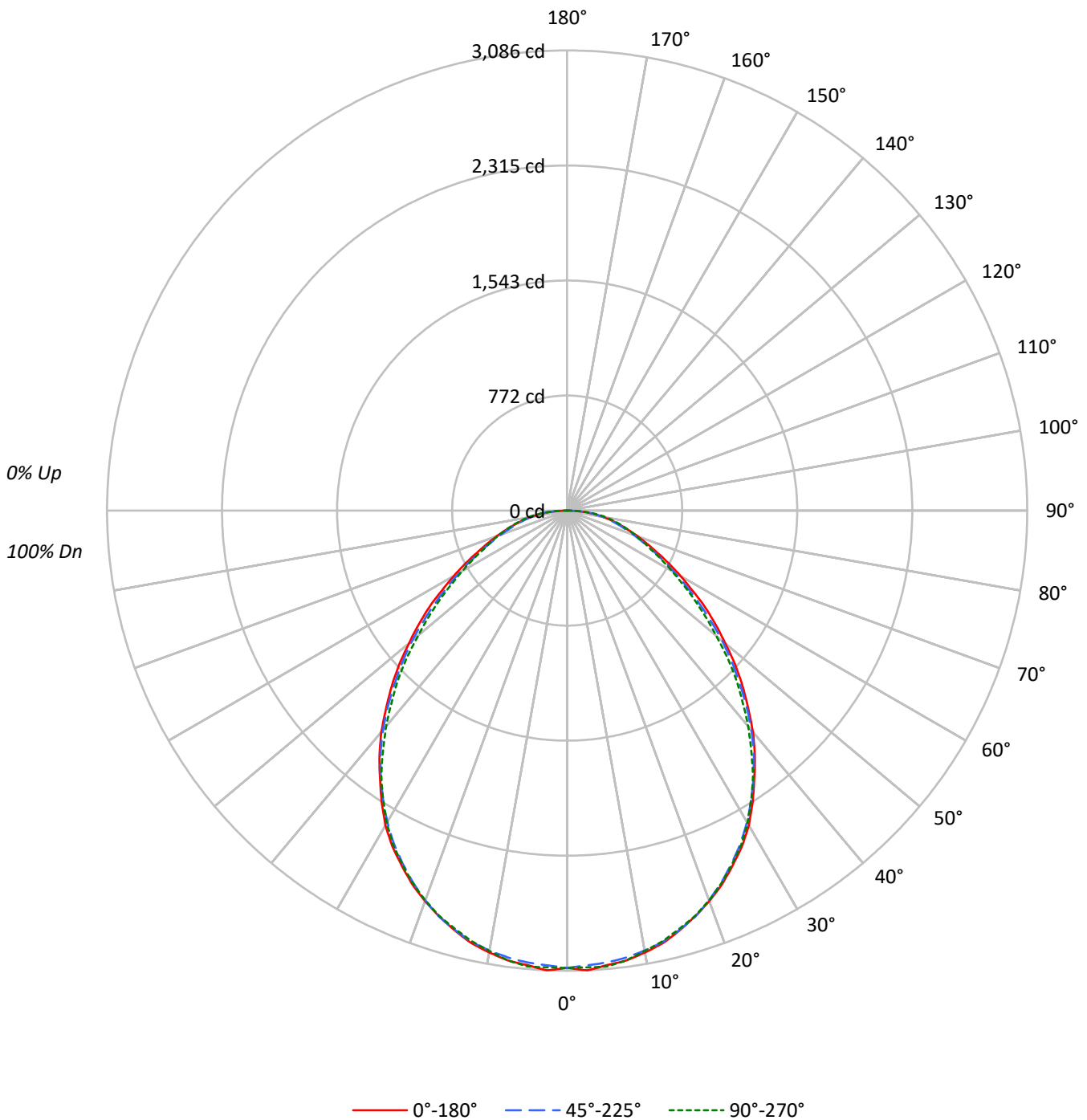
Input Watts (W): 52.824
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4127	4127	4127
5°	4133	4109	4145
10°	4111	4093	4097
15°	4059	4055	4045
20°	3991	3983	3983
25°	3898	3877	3885
30°	3785	3747	3758
35°	3595	3579	3569
40°	3405	3374	3315
45°	3165	3109	3048
50°	2899	2835	2728
55°	2648	2528	2443
60°	2359	2246	2187
65°	2124	2012	1984
70°	1971	1851	1925
75°	1885	1802	1953
80°	1884	1884	2087
85°	1956	1979	2203



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.7	4.1
10°-20°	819.7	11.6
20°-30°	1203.0	17.0
30°-40°	1360.1	19.3
40°-50°	1257.0	17.8
50°-60°	968.5	13.7
60°-70°	641.3	9.1
70°-80°	381.8	5.4
80°-90°	139.9	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°	2312.4	32.7
0°-40°	3672.5	52.0
0°-60°	5898.1	83.5
0°-90°	7061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3067	3067	3067	3067	3067	
5°	3060	3060	3042	3044	3069	291
15°	2914	2908	2911	2910	2904	821
25°	2626	2619	2611	2608	2617	1209
35°	2189	2186	2179	2168	2173	1370
45°	1663	1652	1634	1605	1602	1281
55°	1129	1105	1078	1049	1041	1007
65°	667	657	632	626	623	669
75°	363	354	347	363	376	387
85°	127	119	128	141	143	135
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3067.1	3067.1	3067.1	3067.1	3067.1
2.5°	3086.1	3070.0	3052.6	3052.6	3065.7
5°	3059.8	3059.8	3042.4	3043.8	3068.6
7.5°	3043.8	3035.1	3023.4	3023.4	3042.4
10°	3008.9	3001.6	2995.8	2992.9	2998.7
12.5°	2971.0	2959.4	2963.7	2959.4	2957.9
15°	2914.2	2908.4	2911.3	2909.8	2904.0
17.5°	2853.0	2850.1	2856.0	2845.8	2850.1
20°	2787.5	2778.8	2781.7	2775.9	2781.7
22.5°	2713.2	2707.4	2700.1	2692.8	2704.5
25°	2625.8	2618.6	2611.3	2608.4	2617.1
27.5°	2538.5	2526.8	2516.6	2513.7	2526.8
30°	2436.5	2423.4	2411.8	2408.8	2419.0
32.5°	2315.6	2312.7	2298.2	2292.3	2296.7
35°	2188.9	2186.0	2178.7	2168.5	2172.9
37.5°	2068.1	2066.6	2056.4	2038.9	2027.3
40°	1938.4	1928.2	1921.0	1896.2	1887.5
42.5°	1795.7	1792.8	1779.7	1752.0	1741.8
45°	1663.2	1651.5	1634.1	1604.9	1602.0
47.5°	1526.3	1510.3	1494.2	1457.8	1456.4
50°	1385.0	1373.4	1354.4	1318.0	1303.5
52.5°	1253.9	1237.9	1211.7	1176.8	1169.5
55°	1128.7	1105.4	1077.7	1048.6	1041.3
57.5°	994.7	984.5	951.0	927.7	919.0
60°	876.7	868.0	834.5	812.7	812.7
62.5°	770.4	757.3	728.2	713.6	713.6
65°	667.0	656.8	632.1	626.2	623.3
67.5°	578.2	565.1	547.6	546.1	553.4
70°	501.0	485.0	470.4	485.0	489.3
72.5°	428.2	418.0	404.9	423.8	432.5
75°	362.6	353.9	346.6	362.6	375.7
77.5°	302.9	294.2	294.2	311.7	323.3
80°	243.2	237.4	243.2	257.8	269.4
82.5°	186.4	182.0	189.3	203.9	211.2
85°	126.7	119.4	128.2	141.3	142.7
87.5°	59.7	58.3	64.1	72.8	71.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)