

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: P292946

Luminaire Tested: **24GR-LD5-72-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292946  
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-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7592.0 lumens  
Efficiency: N/A  
Efficacy: 141.2 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

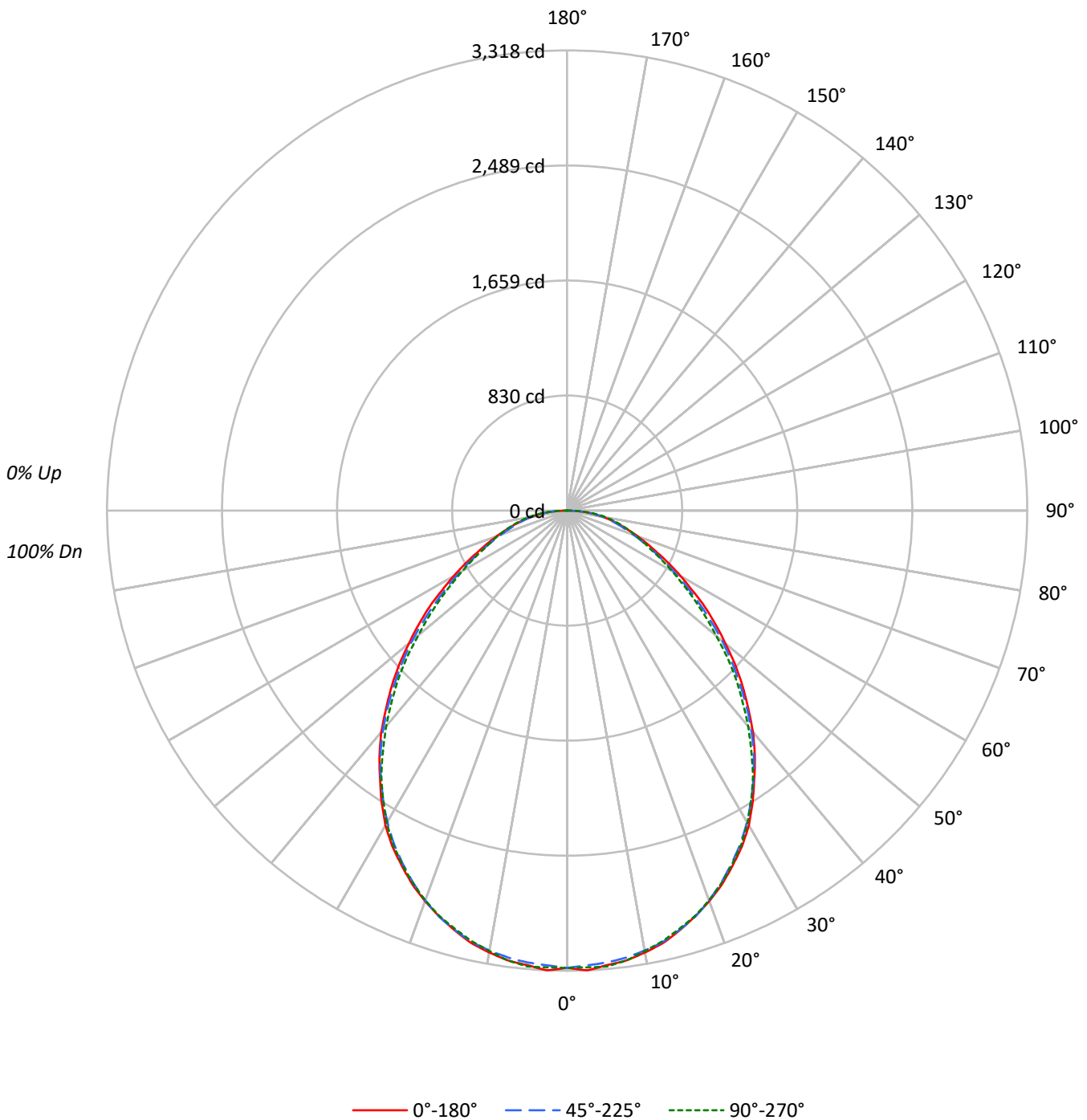
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	81	73	68	78	72	67		75	70	65		72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	50		61	55	50		59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45		56	49	44		54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40		51	44	40		50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36		47	40	36		46	40	36	34
9	59	46	38	33	58	46	38	33	44	38	33		43	37	32		42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30		40	34	30		39	34	30	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4437	4437	4437
5°	4444	4418	4456
10°	4420	4401	4405
15°	4365	4360	4349
20°	4291	4282	4282
25°	4191	4168	4177
30°	4070	4029	4041
35°	3866	3848	3837
40°	3661	3628	3564
45°	3403	3343	3278
50°	3117	3048	2934
55°	2847	2718	2626
60°	2537	2415	2351
65°	2283	2164	2134
70°	2119	1990	2070
75°	2027	1938	2100
80°	2026	2026	2245
85°	2103	2127	2370



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	311.4	4.1
10°-20°	881.4	11.6
20°-30°	1293.5	17.0
30°-40°	1462.4	19.3
40°-50°	1351.6	17.8
50°-60°	1041.3	13.7
60°-70°	689.5	9.1
70°-80°	410.5	5.4
80°-90°	150.4	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°	2486.3	32.7
0°-40°	3948.7	52.0
0°-60°	6341.6	83.5
0°-90°	7592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3298	3298	3298	3298	3298	
5°	3290	3290	3271	3273	3299	313
15°	3133	3127	3130	3129	3122	883
25°	2823	2816	2808	2804	2814	1300
35°	2354	2350	2343	2332	2336	1473
45°	1788	1776	1757	1726	1722	1378
55°	1214	1188	1159	1127	1120	1082
65°	717	706	680	673	670	719
75°	390	380	373	390	404	416
85°	136	128	138	152	154	145
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3297.8	3297.8	3297.8	3297.8	3297.8
2.5°	3318.1	3300.9	3282.1	3282.1	3296.2
5°	3290.0	3290.0	3271.2	3272.7	3299.4
7.5°	3272.7	3263.3	3250.8	3250.8	3271.2
10°	3235.1	3227.3	3221.1	3217.9	3224.2
12.5°	3194.4	3181.9	3186.6	3181.9	3180.3
15°	3133.4	3127.1	3130.2	3128.7	3122.4
17.5°	3067.6	3064.5	3070.7	3059.8	3064.5
20°	2997.1	2987.7	2990.9	2984.6	2990.9
22.5°	2917.3	2911.0	2903.2	2895.3	2907.9
25°	2823.3	2815.5	2807.7	2804.5	2813.9
27.5°	2729.4	2716.8	2705.9	2702.7	2716.8
30°	2619.8	2605.7	2593.1	2590.0	2601.0
32.5°	2489.8	2486.6	2471.0	2464.7	2469.4
35°	2353.5	2350.4	2342.6	2331.6	2336.3
37.5°	2223.6	2222.0	2211.1	2192.3	2179.7
40°	2084.2	2073.3	2065.4	2038.8	2029.4
42.5°	1930.8	1927.6	1913.5	1883.8	1872.8
45°	1788.3	1775.7	1756.9	1725.6	1722.5
47.5°	1641.1	1623.8	1606.6	1567.5	1565.9
50°	1489.2	1476.6	1456.3	1417.1	1401.5
52.5°	1348.2	1331.0	1302.8	1265.2	1257.4
55°	1213.6	1188.5	1158.8	1127.4	1119.6
57.5°	1069.5	1058.5	1022.5	997.5	988.1
60°	942.7	933.3	897.3	873.8	873.8
62.5°	828.4	814.3	782.9	767.3	767.3
65°	717.2	706.2	679.6	673.3	670.2
67.5°	621.7	607.6	588.8	587.2	595.0
70°	538.7	521.4	505.8	521.4	526.1
72.5°	460.4	449.4	435.3	455.7	465.1
75°	389.9	380.5	372.7	389.9	404.0
77.5°	325.7	316.3	316.3	335.1	347.6
80°	261.5	255.2	261.5	277.2	289.7
82.5°	200.4	195.7	203.6	219.2	227.1
85°	136.2	128.4	137.8	151.9	153.5
87.5°	64.2	62.6	68.9	78.3	76.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)