

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: P293030

Luminaire Tested: **24GR-LD5-85-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293030
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-LD5-85-F1-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8420.0 lumens
Efficiency: N/A
Efficacy: 132.4 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

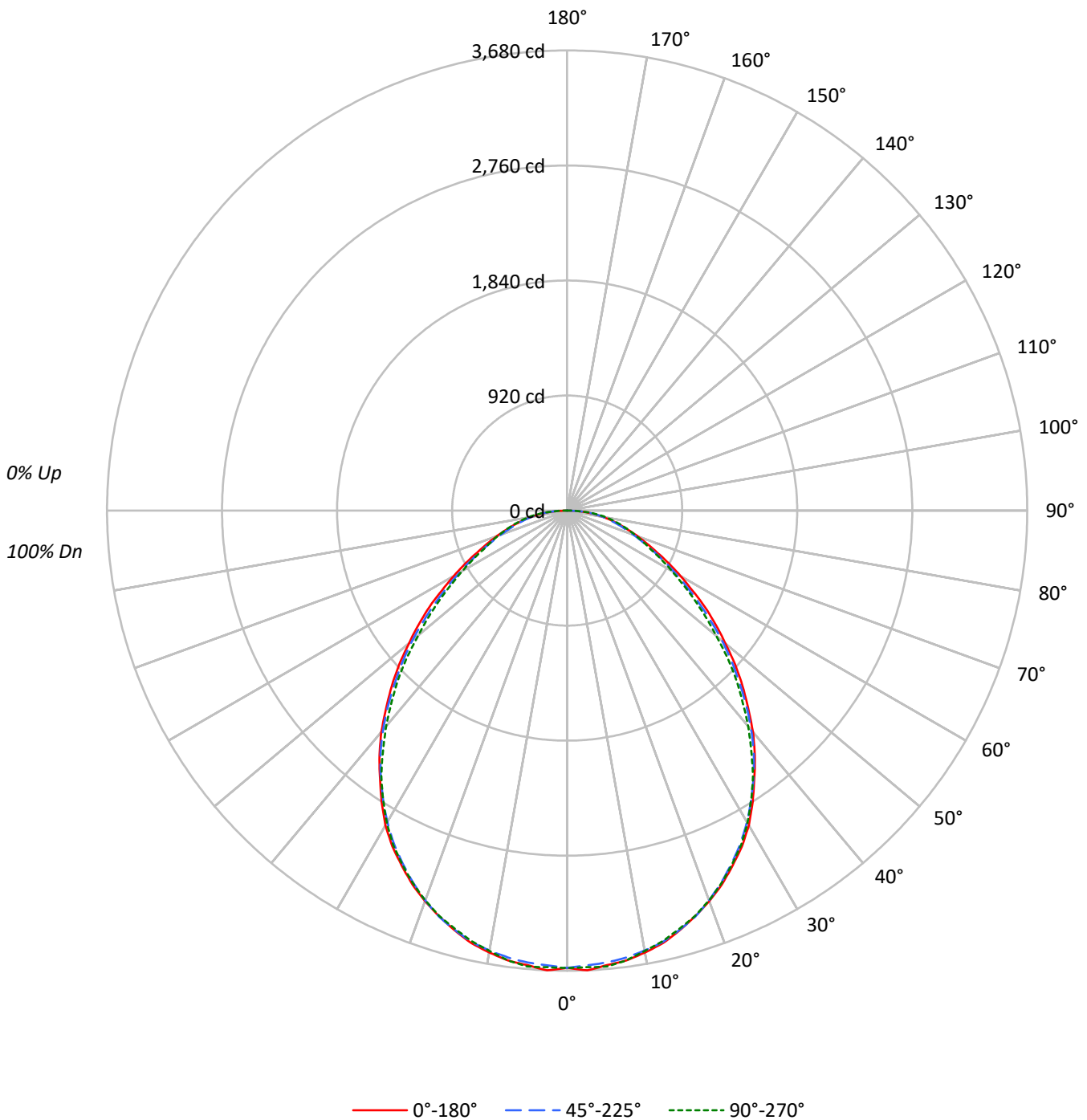
Input Watts (W): 63.612
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4921	4921	4921
5°	4928	4900	4942
10°	4902	4881	4885
15°	4841	4836	4824
20°	4759	4750	4750
25°	4649	4623	4633
30°	4514	4468	4482
35°	4287	4267	4256
40°	4060	4023	3953
45°	3774	3708	3635
50°	3457	3381	3253
55°	3157	3015	2913
60°	2813	2678	2608
65°	2532	2400	2366
70°	2350	2207	2295
75°	2248	2149	2329
80°	2247	2247	2490
85°	2333	2359	2628



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.4	4.1
10°-20°	977.5	11.6
20°-30°	1434.6	17.0
30°-40°	1621.9	19.3
40°-50°	1499.0	17.8
50°-60°	1154.9	13.7
60°-70°	764.7	9.1
70°-80°	455.2	5.4
80°-90°	166.8	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°	2757.5	32.7
0°-40°	4379.4	52.0
0°-60°	7033.2	83.5
0°-90°	8420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8420.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3657	3657	3657	3657	3657	
5°	3649	3649	3628	3630	3659	347
15°	3475	3468	3472	3470	3463	979
25°	3131	3123	3114	3110	3121	1442
35°	2610	2607	2598	2586	2591	1633
45°	1983	1969	1949	1914	1910	1528
55°	1346	1318	1285	1250	1242	1201
65°	795	783	754	747	743	797
75°	432	422	413	432	448	461
85°	151	142	153	168	170	160
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3657.4	3657.4	3657.4	3657.4	3657.4
2.5°	3680.0	3660.9	3640.1	3640.1	3655.7
5°	3648.8	3648.8	3627.9	3629.7	3659.2
7.5°	3629.7	3619.2	3605.3	3605.3	3627.9
10°	3588.0	3579.3	3572.4	3568.9	3575.8
12.5°	3542.8	3528.9	3534.1	3528.9	3527.2
15°	3475.1	3468.2	3471.6	3469.9	3462.9
17.5°	3402.2	3398.7	3405.6	3393.5	3398.7
20°	3324.0	3313.6	3317.1	3310.1	3317.1
22.5°	3235.4	3228.5	3219.8	3211.1	3225.0
25°	3131.2	3122.6	3113.9	3110.4	3120.8
27.5°	3027.0	3013.1	3001.0	2997.5	3013.1
30°	2905.5	2889.8	2875.9	2872.5	2884.6
32.5°	2761.3	2757.8	2740.5	2733.5	2738.7
35°	2610.2	2606.8	2598.1	2585.9	2591.1
37.5°	2466.1	2464.3	2452.2	2431.4	2417.5
40°	2311.5	2299.4	2290.7	2261.2	2250.7
42.5°	2141.3	2137.9	2122.2	2089.2	2077.1
45°	1983.3	1969.4	1948.6	1913.8	1910.3
47.5°	1820.0	1800.9	1781.8	1738.4	1736.7
50°	1651.6	1637.7	1615.1	1571.7	1554.3
52.5°	1495.3	1476.2	1444.9	1403.2	1394.6
55°	1345.9	1318.1	1285.1	1250.4	1241.7
57.5°	1186.2	1174.0	1134.1	1106.3	1095.8
60°	1045.5	1035.1	995.1	969.1	969.1
62.5°	918.7	903.1	868.3	851.0	851.0
65°	795.4	783.2	753.7	746.8	743.3
67.5°	689.5	673.8	653.0	651.3	659.9
70°	597.4	578.3	560.9	578.3	583.5
72.5°	510.6	498.4	482.8	505.4	515.8
75°	432.4	422.0	413.3	432.4	448.1
77.5°	361.2	350.8	350.8	371.6	385.5
80°	290.0	283.1	290.0	307.4	321.3
82.5°	222.3	217.1	225.8	243.1	251.8
85°	151.1	142.4	152.8	168.5	170.2
87.5°	71.2	69.5	76.4	86.8	85.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)