

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: P293455

Luminaire Tested: **24GR-LD5-85-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-A-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8805.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

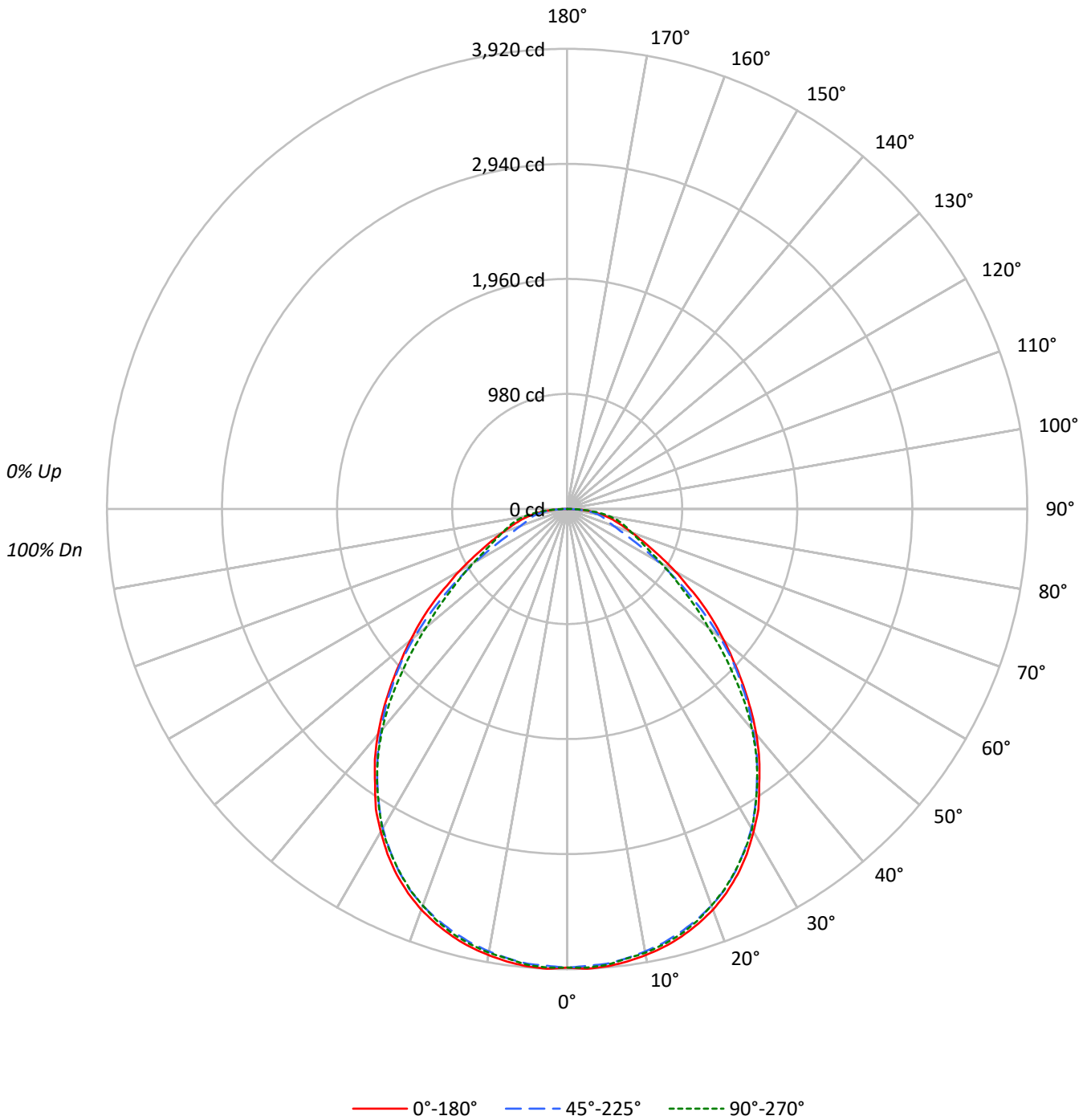
Input Watts (W): 63.798
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5256	5256	5256
5°	5282	5253	5265
10°	5272	5230	5245
15°	5252	5199	5222
20°	5202	5150	5148
25°	5101	5047	5043
30°	4933	4882	4892
35°	4685	4632	4638
40°	4406	4329	4303
45°	4038	3983	3826
50°	3650	3551	3283
55°	3277	2983	2830
60°	2870	2401	2489
65°	2503	1888	2291
70°	2290	1648	2290
75°	2291	1753	2524
80°	2487	2066	2878
85°	2729	2331	3088



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.9	4.2
10°-20°	1055.8	12.0
20°-30°	1565.5	17.8
30°-40°	1766.1	20.1
40°-50°	1599.5	18.2
50°-60°	1154.0	13.1
60°-70°	689.0	7.8
70°-80°	425.8	4.8
80°-90°	179.4	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°	2991.2	34.0
0°-40°	4757.3	54.0
0°-60°	7510.8	85.3
0°-90°	8805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3907	3907	3907	3907	3907	
5°	3911	3905	3889	3885	3898	372
15°	3771	3748	3733	3734	3749	1063
25°	3436	3417	3399	3387	3397	1578
35°	2852	2848	2820	2821	2824	1785
45°	2122	2108	2093	2042	2010	1635
55°	1397	1354	1272	1209	1207	1247
65°	786	692	593	673	720	791
75°	441	382	337	420	486	471
85°	177	155	151	197	200	185
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3906.7	3906.7	3906.7	3906.7	3906.7
2.5°	3920.3	3909.4	3895.8	3904.0	3910.8
5°	3910.8	3905.3	3889.0	3884.9	3898.5
7.5°	3890.4	3876.8	3861.8	3868.6	3863.1
10°	3859.1	3846.8	3827.8	3829.1	3838.7
12.5°	3821.0	3806.0	3785.6	3791.1	3799.2
15°	3770.7	3747.5	3732.6	3733.9	3748.9
17.5°	3706.7	3689.0	3670.0	3674.1	3680.9
20°	3633.3	3623.7	3596.5	3588.4	3595.2
22.5°	3540.8	3523.1	3508.1	3504.0	3505.4
25°	3436.0	3417.0	3399.3	3387.1	3396.6
27.5°	3313.6	3297.3	3274.2	3270.1	3278.2
30°	3174.9	3162.6	3142.2	3136.8	3149.0
32.5°	3033.4	3013.0	2984.4	2984.4	2987.1
35°	2852.5	2848.4	2819.8	2821.2	2823.9
37.5°	2689.2	2670.2	2653.9	2637.6	2645.7
40°	2508.3	2486.6	2464.8	2453.9	2449.8
42.5°	2313.8	2297.5	2288.0	2248.5	2239.0
45°	2122.0	2108.4	2093.4	2041.8	2010.5
47.5°	1926.1	1923.4	1911.2	1820.0	1788.7
50°	1743.9	1739.8	1696.2	1599.7	1568.4
52.5°	1571.1	1543.9	1486.8	1391.5	1386.1
55°	1397.0	1353.5	1271.8	1209.3	1206.6
57.5°	1213.4	1161.7	1078.7	1044.7	1062.4
60°	1066.4	987.6	892.3	896.4	925.0
62.5°	914.1	825.7	731.8	772.6	806.6
65°	786.2	692.4	593.1	673.3	719.6
67.5°	674.7	587.6	492.4	599.9	644.8
70°	582.2	511.5	419.0	531.9	582.2
72.5°	508.7	443.4	371.4	477.5	535.9
75°	440.7	382.2	337.3	420.3	485.6
77.5°	382.2	325.1	304.7	371.4	435.3
80°	321.0	269.3	266.6	323.7	371.4
82.5°	250.3	214.9	214.9	270.7	299.3
85°	176.8	155.1	151.0	197.2	200.0
87.5°	91.1	87.1	78.9	103.4	103.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)