

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: P293471

Luminaire Tested: **24GR-LD5-34-A-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293471
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-LD5-34-A-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3588.0 lumens
Efficiency: N/A
Efficacy: 153.1 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

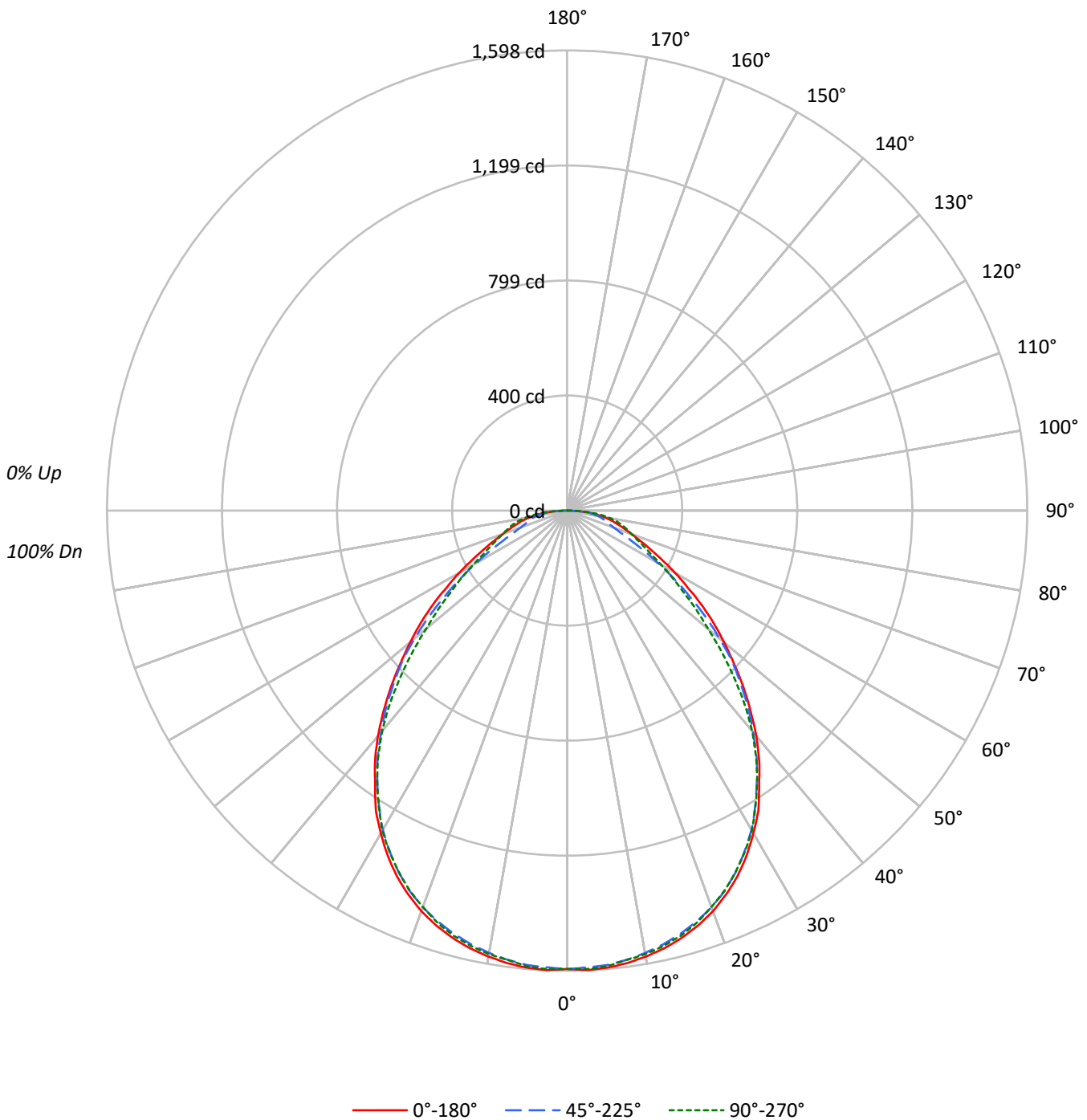
Input Watts (W): 23.436
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2142	2142	2142
5°	2152	2140	2146
10°	2149	2131	2137
15°	2140	2119	2128
20°	2120	2099	2098
25°	2079	2056	2055
30°	2010	1989	1994
35°	1909	1887	1890
40°	1795	1764	1753
45°	1645	1623	1559
50°	1487	1447	1338
55°	1335	1216	1153
60°	1169	978	1014
65°	1020	770	933
70°	933	672	933
75°	934	715	1029
80°	1013	841	1172
85°	1113	949	1258



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	4.2
10°-20°	430.2	12.0
20°-30°	637.9	17.8
30°-40°	719.7	20.1
40°-50°	651.8	18.2
50°-60°	470.2	13.1
60°-70°	280.8	7.8
70°-80°	173.5	4.8
80°-90°	73.1	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°	1218.9	34.0
0°-40°	1938.6	54.0
0°-60°	3060.6	85.3
0°-90°	3588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1594	1591	1585	1583	1589	151
15°	1536	1527	1521	1522	1528	433
25°	1400	1392	1385	1380	1384	643
35°	1162	1161	1149	1150	1151	727
45°	865	859	853	832	819	666
55°	569	552	518	493	492	508
65°	320	282	242	274	293	322
75°	180	156	138	171	198	192
85°	72	63	62	80	82	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1597.5	1593.1	1587.5	1590.8	1593.6
5°	1593.6	1591.4	1584.7	1583.1	1588.6
7.5°	1585.3	1579.8	1573.7	1576.4	1574.2
10°	1572.6	1567.6	1559.8	1560.4	1564.2
12.5°	1557.0	1550.9	1542.6	1544.8	1548.2
15°	1536.5	1527.1	1521.0	1521.6	1527.7
17.5°	1510.5	1503.3	1495.5	1497.2	1499.9
20°	1480.5	1476.7	1465.6	1462.2	1465.0
22.5°	1442.8	1435.6	1429.5	1427.9	1428.4
25°	1400.2	1392.4	1385.2	1380.2	1384.1
27.5°	1350.3	1343.6	1334.2	1332.5	1335.9
30°	1293.7	1288.8	1280.4	1278.2	1283.2
32.5°	1236.1	1227.8	1216.1	1216.1	1217.2
35°	1162.4	1160.7	1149.1	1149.6	1150.7
37.5°	1095.9	1088.1	1081.4	1074.8	1078.1
40°	1022.1	1013.3	1004.4	1000.0	998.3
42.5°	942.9	936.2	932.3	916.3	912.4
45°	864.7	859.2	853.1	832.0	819.3
47.5°	784.9	783.8	778.8	741.7	728.9
50°	710.6	709.0	691.2	651.9	639.1
52.5°	640.2	629.1	605.9	567.1	564.8
55°	569.3	551.5	518.3	492.8	491.7
57.5°	494.4	473.4	439.6	425.7	432.9
60°	434.6	402.4	363.6	365.3	376.9
62.5°	372.5	336.5	298.2	314.8	328.7
65°	320.4	282.1	241.7	274.4	293.2
67.5°	274.9	239.5	200.7	244.4	262.7
70°	237.2	208.4	170.7	216.7	237.2
72.5°	207.3	180.7	151.3	194.6	218.4
75°	179.6	155.8	137.5	171.3	197.9
77.5°	155.8	132.5	124.2	151.3	177.4
80°	130.8	109.8	108.6	131.9	151.3
82.5°	102.0	87.6	87.6	110.3	121.9
85°	72.1	63.2	61.5	80.4	81.5
87.5°	37.1	35.5	32.1	42.1	42.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)