

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: P294101

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294101
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-A19/156-UNV-L92765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3079.0 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

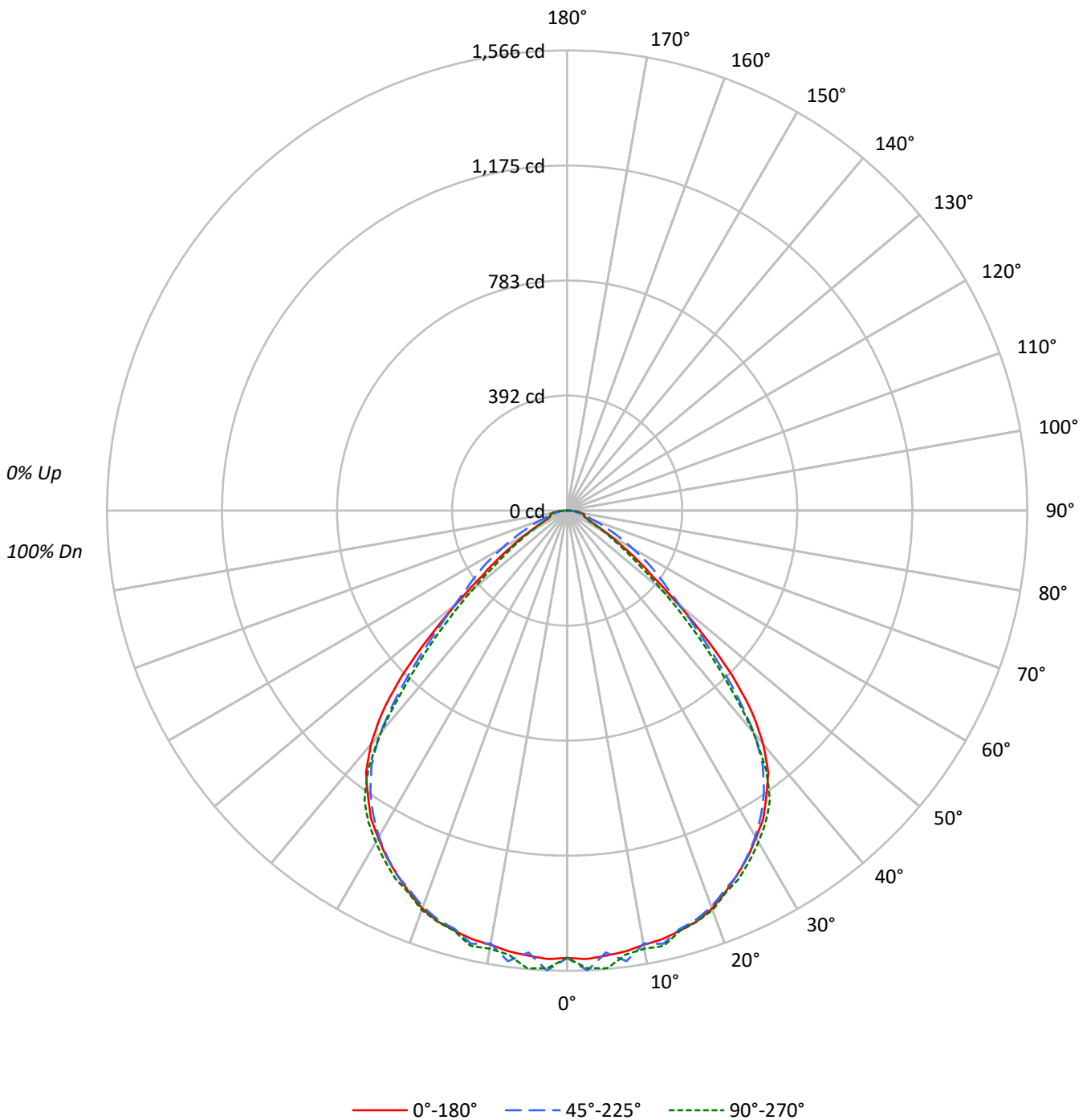
Input Watts (W): 23.436
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41		51	45	41		50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38		48	42	37		47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34		44	38	34		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2049	2049	2049
5°	2053	2040	2112
10°	2050	2044	2069
15°	2062	2055	2063
20°	2063	2055	2072
25°	2031	2033	2052
30°	1997	1991	2023
35°	1941	1918	1975
40°	1823	1741	1732
45°	1511	1367	1297
50°	1016	1037	886
55°	670	870	581
60°	430	686	398
65°	277	524	269
70°	245	375	245
75°	316	298	319
80°	387	256	406
85°	451	381	474



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	4.7
10°-20°	418.6	13.6
20°-30°	630.2	20.5
30°-40°	730.4	23.7
40°-50°	570.5	18.5
50°-60°	304.7	9.9
60°-70°	156.7	5.1
70°-80°	88.6	2.9
80°-90°	33.7	1.1
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°	1194.5	38.8
0°-40°	1924.9	62.5
0°-60°	2800.1	90.9
0°-90°	3079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1522	1522	1522	1522	1522	
5°	1520	1562	1510	1552	1564	145
15°	1480	1489	1475	1484	1481	418
25°	1368	1364	1369	1367	1382	630
35°	1182	1176	1167	1191	1203	737
45°	794	795	718	712	681	598
55°	286	362	371	334	248	264
65°	87	182	165	181	85	96
75°	61	114	57	107	61	62
85°	29	38	25	38	31	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1522.5	1522.5	1522.5	1522.5	1522.5
2.5°	1527.4	1555.1	1566.0	1552.6	1558.6
5°	1520.0	1562.5	1510.1	1551.7	1563.5
7.5°	1513.1	1508.6	1546.7	1507.1	1524.0
10°	1500.2	1503.2	1495.8	1524.0	1514.1
12.5°	1494.3	1511.6	1510.1	1495.8	1517.5
15°	1480.0	1489.3	1475.0	1484.4	1480.9
17.5°	1465.6	1461.2	1459.7	1463.6	1467.1
20°	1440.9	1426.1	1435.0	1435.9	1446.8
22.5°	1405.3	1396.4	1398.4	1407.3	1408.3
25°	1368.2	1363.8	1369.2	1367.2	1382.5
27.5°	1329.6	1323.7	1327.2	1334.6	1344.0
30°	1285.6	1284.1	1281.7	1288.1	1302.4
32.5°	1242.1	1230.2	1228.3	1241.6	1257.9
35°	1181.8	1176.3	1167.4	1190.7	1202.6
37.5°	1124.4	1107.6	1093.3	1107.1	1112.1
40°	1037.9	1025.0	991.4	992.9	986.0
42.5°	931.6	922.2	857.9	846.5	827.3
45°	794.1	794.6	718.5	712.0	681.4
47.5°	634.4	662.6	596.3	588.9	543.4
50°	485.6	536.5	495.5	483.6	423.3
52.5°	364.4	439.1	426.2	400.5	317.5
55°	285.8	361.5	370.9	334.3	247.7
57.5°	215.1	297.7	313.0	282.8	191.4
60°	159.7	250.7	255.1	243.3	147.8
62.5°	118.7	213.1	207.2	208.7	109.8
65°	87.0	181.5	164.7	181.0	84.6
67.5°	71.2	157.2	128.1	156.7	68.7
70°	62.3	139.4	95.4	138.0	62.3
72.5°	60.3	128.1	75.7	122.6	60.8
75°	60.8	114.2	57.4	106.8	61.3
77.5°	55.9	93.9	43.5	91.0	58.3
80°	49.9	71.2	33.1	72.2	52.4
82.5°	42.5	51.9	26.7	53.4	44.0
85°	29.2	38.1	24.7	38.1	30.7
87.5°	13.8	22.7	15.3	21.8	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)