

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: P294108

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294108
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-LD5-38-A19/156-UNV-L92765-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3204.0 lumens
Efficiency: N/A
Efficacy: 125.7 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

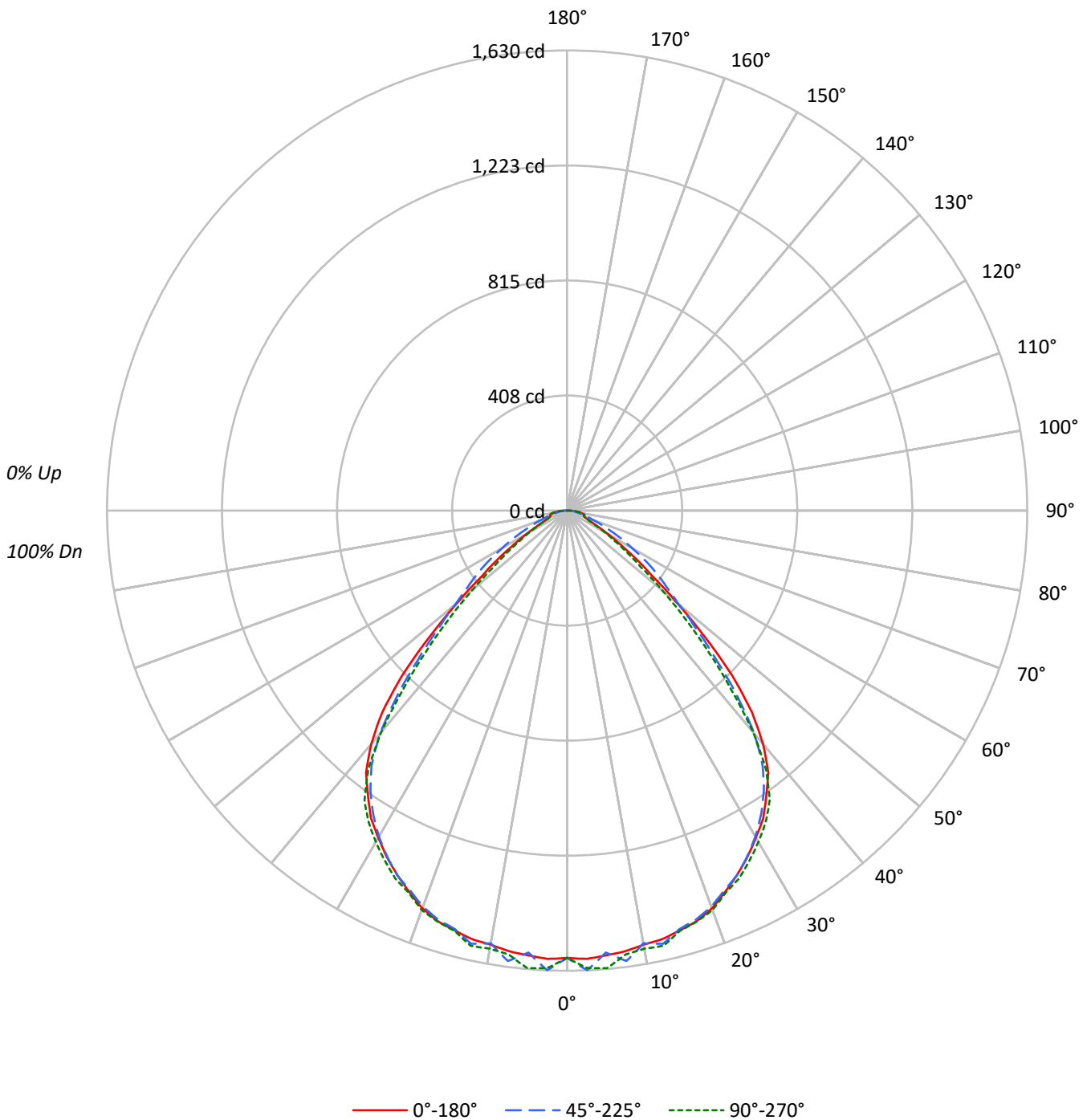
Input Watts (W): 25.482
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2132	2132	2132
5°	2136	2122	2197
10°	2133	2127	2153
15°	2145	2138	2147
20°	2147	2138	2156
25°	2114	2115	2136
30°	2078	2072	2106
35°	2020	1995	2055
40°	1897	1812	1802
45°	1572	1423	1349
50°	1058	1079	922
55°	698	905	605
60°	447	714	414
65°	288	545	280
70°	255	391	255
75°	329	310	332
80°	403	267	422
85°	469	397	492



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.7	4.7
10°-20°	435.6	13.6
20°-30°	655.7	20.5
30°-40°	760.0	23.7
40°-50°	593.7	18.5
50°-60°	317.0	9.9
60°-70°	163.0	5.1
70°-80°	92.2	2.9
80°-90°	35.0	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°	1243.0	38.8
0°-40°	2003.0	62.5
0°-60°	2913.7	90.9
0°-90°	3204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1584	1584	1584	1584	1584	
5°	1582	1626	1571	1615	1627	150
15°	1540	1550	1535	1545	1541	435
25°	1424	1419	1425	1423	1439	656
35°	1230	1224	1215	1239	1251	767
45°	826	827	748	741	709	623
55°	297	376	386	348	258	274
65°	91	189	171	188	88	100
75°	63	119	60	111	64	64
85°	30	40	26	40	32	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1584.3	1584.3	1584.3	1584.3	1584.3
2.5°	1589.4	1618.2	1629.6	1615.7	1621.8
5°	1581.7	1626.0	1571.4	1614.6	1627.0
7.5°	1574.5	1569.9	1609.5	1568.3	1585.8
10°	1561.1	1564.2	1556.5	1585.8	1575.5
12.5°	1555.0	1573.0	1571.4	1556.5	1579.1
15°	1540.0	1549.8	1534.9	1544.7	1541.1
17.5°	1525.1	1520.5	1518.9	1523.1	1526.7
20°	1499.4	1483.9	1493.2	1494.2	1505.6
22.5°	1462.3	1453.1	1455.1	1464.4	1465.4
25°	1423.7	1419.1	1424.8	1422.7	1438.7
27.5°	1383.6	1377.4	1381.0	1388.8	1398.5
30°	1337.8	1336.3	1333.7	1340.4	1355.3
32.5°	1292.5	1280.2	1278.1	1292.0	1309.0
35°	1229.8	1224.1	1214.8	1239.0	1251.4
37.5°	1170.1	1152.6	1137.7	1152.1	1157.2
40°	1080.0	1066.7	1031.7	1033.2	1026.0
42.5°	969.4	959.6	892.7	880.9	860.8
45°	826.4	826.9	747.6	740.9	709.0
47.5°	660.2	689.5	620.5	612.8	565.5
50°	505.3	558.3	515.6	503.2	440.5
52.5°	379.2	456.9	443.5	416.8	330.3
55°	297.4	376.1	385.9	347.8	257.8
57.5°	223.8	309.8	325.7	294.3	199.1
60°	166.2	260.9	265.5	253.2	153.8
62.5°	123.5	221.8	215.6	217.1	114.2
65°	90.6	188.8	171.3	188.3	88.0
67.5°	74.1	163.6	133.3	163.1	71.5
70°	64.8	145.1	99.3	143.6	64.8
72.5°	62.8	133.3	78.7	127.6	63.3
75°	63.3	118.9	59.7	111.1	63.8
77.5°	58.1	97.8	45.3	94.7	60.7
80°	52.0	74.1	34.5	75.1	54.5
82.5°	44.3	54.0	27.8	55.6	45.8
85°	30.4	39.6	25.7	39.6	31.9
87.5°	14.4	23.7	16.0	22.6	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)