

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: P292524

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292524
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2523.0 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

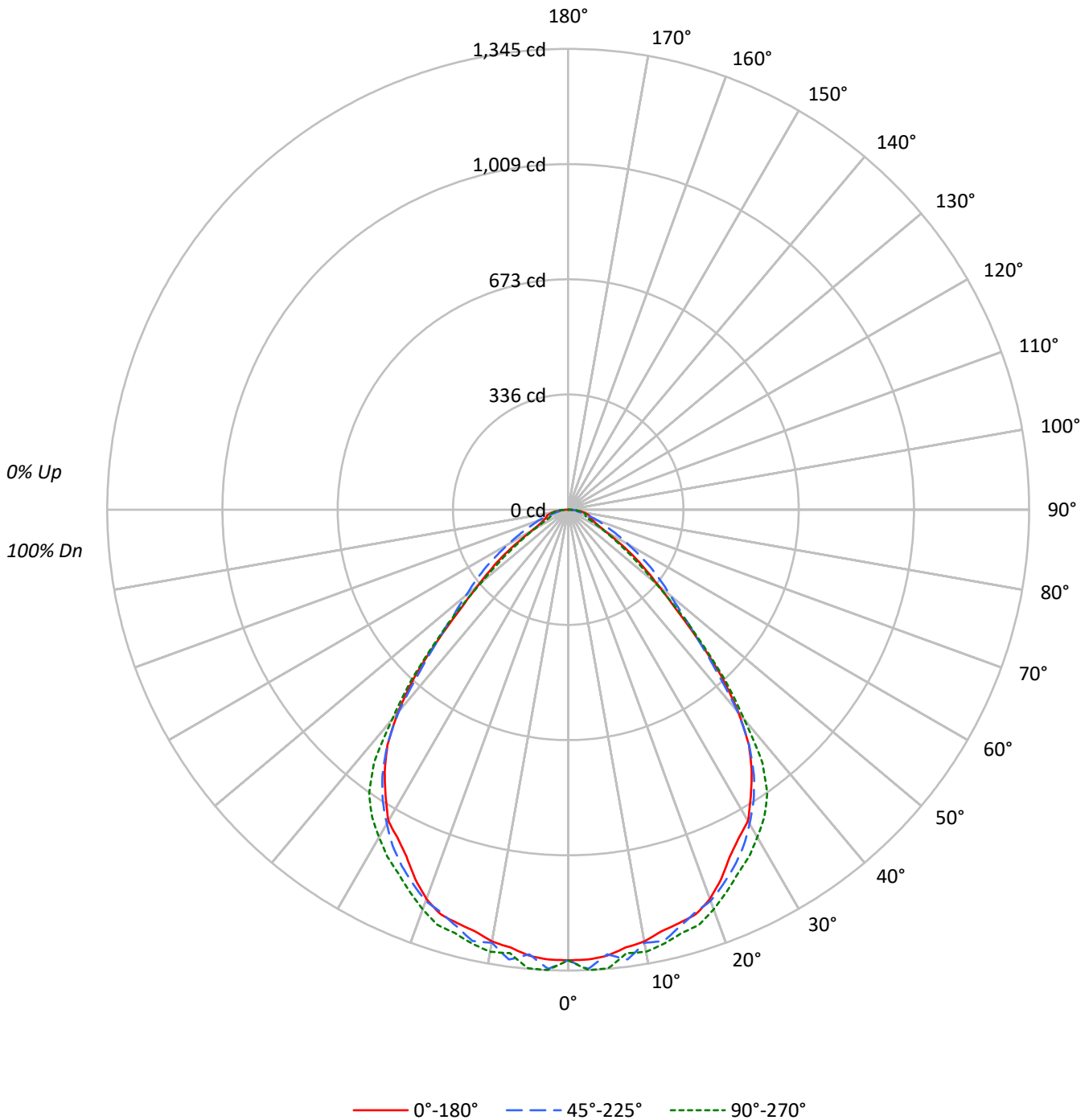
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3538	3538	3538
5°	3529	3518	3629
10°	3497	3507	3580
15°	3481	3507	3564
20°	3462	3480	3554
25°	3315	3408	3479
30°	3260	3290	3430
35°	3066	3105	3325
40°	2717	2698	2804
45°	2029	2034	2090
50°	1428	1625	1384
55°	1054	1372	945
60°	659	1084	617
65°	537	859	432
70°	533	716	426
75°	661	525	550
80°	738	415	673
85°	735	772	753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.2	5.0
10°-20°	356.5	14.1
20°-30°	528.1	20.9
30°-40°	591.5	23.4
40°-50°	434.6	17.2
50°-60°	242.9	9.6
60°-70°	135.4	5.4
70°-80°	79.6	3.2
80°-90°	29.3	1.2
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°	1009.8	40.0
0°-40°	1601.3	63.5
0°-60°	2278.8	90.3
0°-90°	2523.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2523.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1315	1315	1315	1315	1315	
5°	1307	1331	1302	1329	1344	124
15°	1250	1257	1259	1278	1279	353
25°	1116	1125	1148	1164	1172	517
35°	933	934	945	988	1012	578
45°	533	577	534	572	549	417
55°	225	273	292	292	202	201
65°	84	150	135	173	68	87
75°	64	90	50	102	53	64
85°	24	35	25	32	24	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1314.9	1314.9	1314.9	1314.9	1314.9
2.5°	1314.3	1326.2	1341.7	1343.5	1344.6
5°	1306.6	1331.0	1302.4	1329.2	1343.5
7.5°	1288.8	1303.6	1324.4	1297.7	1305.4
10°	1279.8	1283.4	1283.4	1316.7	1310.2
12.5°	1259.6	1283.4	1289.4	1282.8	1297.1
15°	1249.5	1257.3	1259.0	1278.1	1279.3
17.5°	1238.2	1236.5	1232.3	1246.0	1270.3
20°	1209.1	1202.6	1215.1	1231.7	1241.2
22.5°	1166.3	1168.1	1183.0	1196.6	1207.3
25°	1116.4	1125.3	1147.9	1163.9	1171.7
27.5°	1078.9	1092.0	1107.5	1126.5	1141.9
30°	1049.2	1048.0	1058.7	1086.1	1103.9
32.5°	991.5	995.7	1007.0	1039.7	1064.7
35°	933.3	933.9	945.2	988.0	1012.3
37.5°	866.1	861.4	867.9	914.3	930.3
40°	773.4	774.6	768.0	800.7	798.3
42.5°	665.2	674.7	640.8	683.6	680.6
45°	533.2	576.6	534.4	572.5	549.3
47.5°	420.9	485.1	450.0	477.9	434.5
50°	341.2	407.2	388.2	400.7	330.5
52.5°	280.0	333.5	339.4	342.4	258.0
55°	224.7	273.4	292.5	291.9	201.5
57.5°	165.9	222.3	244.3	253.2	152.8
60°	122.5	184.9	201.5	221.1	114.7
62.5°	98.7	162.3	166.4	193.8	87.4
65°	84.4	149.8	134.9	173.0	67.8
67.5°	74.9	139.7	110.0	154.6	57.7
70°	67.8	124.2	91.0	138.5	54.1
72.5°	66.0	105.8	70.1	123.6	53.5
75°	63.6	89.8	50.5	101.7	52.9
77.5°	54.7	76.7	36.3	78.5	49.3
80°	47.6	61.2	26.8	58.9	43.4
82.5°	36.9	46.4	23.8	44.6	35.1
85°	23.8	35.1	25.0	32.1	24.4
87.5°	11.3	19.6	17.8	17.2	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)