

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: P292525

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292525
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-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2546.0 lumens
Efficiency: N/A
Efficacy: 133.5 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

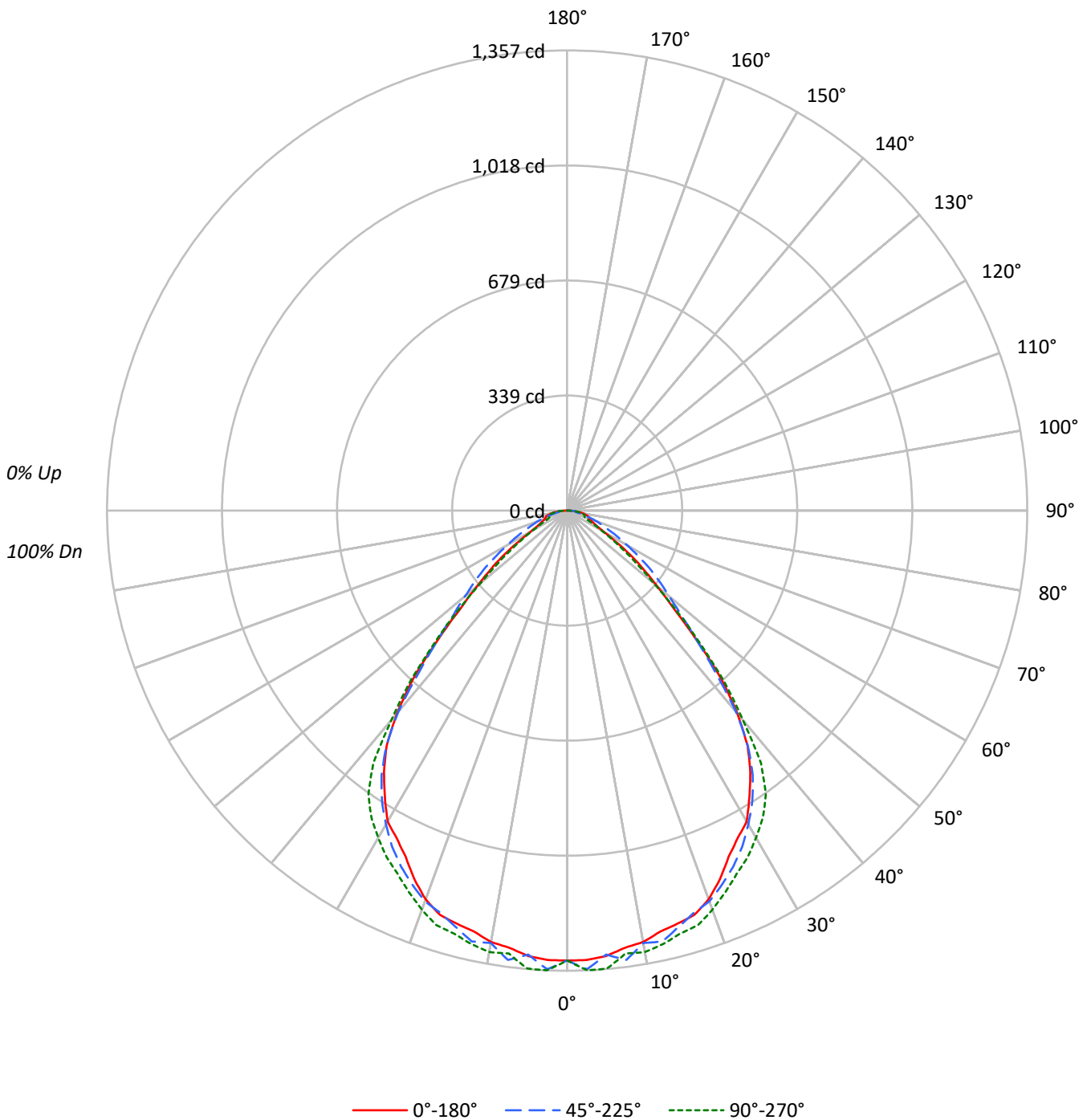
Input Watts (W): 19.065
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3571	3571	3571
5°	3562	3550	3662
10°	3529	3539	3613
15°	3513	3539	3596
20°	3494	3511	3587
25°	3345	3439	3510
30°	3290	3320	3462
35°	3094	3133	3356
40°	2741	2722	2830
45°	2048	2052	2109
50°	1441	1640	1396
55°	1064	1384	954
60°	665	1095	623
65°	543	867	436
70°	538	722	430
75°	667	530	555
80°	744	418	679
85°	741	778	760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	5.0
10°-20°	359.8	14.1
20°-30°	532.9	20.9
30°-40°	596.9	23.4
40°-50°	438.6	17.2
50°-60°	245.1	9.6
60°-70°	136.7	5.4
70°-80°	80.3	3.2
80°-90°	29.5	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°	1019.0	40.0
0°-40°	1615.8	63.5
0°-60°	2299.6	90.3
0°-90°	2546.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2546.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1318	1343	1314	1341	1356	125
15°	1261	1269	1270	1290	1291	356
25°	1126	1136	1158	1174	1182	522
35°	942	942	954	997	1022	583
45°	538	582	539	578	554	420
55°	227	276	295	294	203	202
65°	85	151	136	175	68	88
75°	64	91	51	103	53	65
85°	24	35	25	32	25	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1326.9	1326.9	1326.9	1326.9	1326.9
2.5°	1326.3	1338.3	1353.9	1355.7	1356.9
5°	1318.5	1343.1	1314.3	1341.3	1355.7
7.5°	1300.5	1315.5	1336.5	1309.5	1317.3
10°	1291.5	1295.1	1295.1	1328.7	1322.1
12.5°	1271.1	1295.1	1301.1	1294.5	1308.9
15°	1260.9	1268.7	1270.5	1289.7	1290.9
17.5°	1249.5	1247.7	1243.5	1257.3	1281.9
20°	1220.1	1213.5	1226.1	1242.9	1252.5
22.5°	1176.9	1178.7	1193.7	1207.5	1218.3
25°	1126.5	1135.5	1158.3	1174.5	1182.3
27.5°	1088.8	1102.0	1117.6	1136.7	1152.3
30°	1058.8	1057.6	1068.4	1096.0	1114.0
32.5°	1000.6	1004.8	1016.2	1049.2	1074.4
35°	941.8	942.4	953.8	997.0	1021.6
37.5°	874.0	869.2	875.8	922.6	938.8
40°	780.4	781.6	775.0	808.0	805.6
42.5°	671.3	680.8	646.7	689.8	686.8
45°	538.1	581.9	539.3	577.7	554.3
47.5°	424.7	489.5	454.1	482.3	438.5
50°	344.3	410.9	391.7	404.3	333.5
52.5°	282.5	336.5	342.5	345.5	260.3
55°	226.7	275.9	295.1	294.5	203.4
57.5°	167.4	224.4	246.5	255.5	154.2
60°	123.6	186.6	203.4	223.2	115.8
62.5°	99.6	163.8	168.0	195.6	88.2
65°	85.2	151.2	136.2	174.6	68.4
67.5°	75.6	141.0	111.0	156.0	58.2
70°	68.4	125.4	91.8	139.8	54.6
72.5°	66.6	106.8	70.8	124.8	54.0
75°	64.2	90.6	51.0	102.6	53.4
77.5°	55.2	77.4	36.6	79.2	49.8
80°	48.0	61.8	27.0	59.4	43.8
82.5°	37.2	46.8	24.0	45.0	35.4
85°	24.0	35.4	25.2	32.4	24.6
87.5°	11.4	19.8	18.0	17.4	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)