

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: P292563

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292563
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-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2347.0 lumens
Efficiency: N/A
Efficacy: 128.8 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

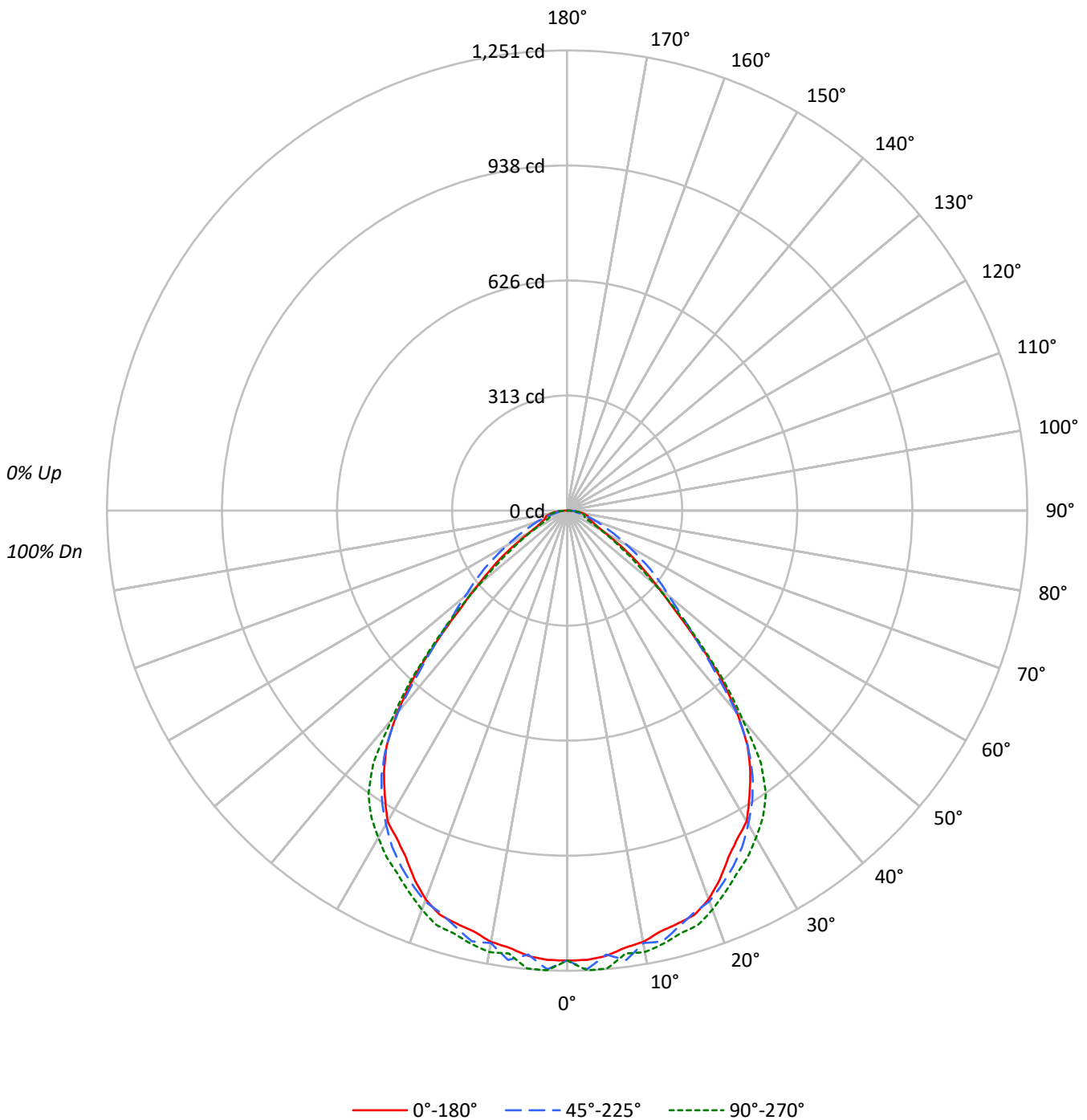
Input Watts (W): 18.228
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3292	3292	3292
5°	3283	3273	3376
10°	3253	3262	3330
15°	3238	3263	3315
20°	3221	3237	3306
25°	3083	3170	3236
30°	3033	3060	3191
35°	2852	2888	3094
40°	2527	2510	2609
45°	1888	1892	1945
50°	1329	1512	1287
55°	981	1277	880
60°	613	1009	574
65°	500	799	401
70°	496	666	396
75°	616	489	512
80°	685	386	626
85°	682	716	701



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	5.0
10°-20°	331.7	14.1
20°-30°	491.2	20.9
30°-40°	550.2	23.4
40°-50°	404.3	17.2
50°-60°	226.0	9.6
60°-70°	126.0	5.4
70°-80°	74.0	3.2
80°-90°	27.2	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°	939.3	40.0
0°-40°	1489.6	63.5
0°-60°	2119.9	90.3
0°-90°	2347.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1215	1238	1212	1236	1250	115
15°	1162	1170	1171	1189	1190	328
25°	1038	1047	1068	1083	1090	481
35°	868	869	879	919	942	538
45°	496	536	497	532	511	388
55°	209	254	272	272	188	187
65°	78	139	126	161	63	81
75°	59	84	47	95	49	59
85°	22	33	23	30	23	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1223.2	1223.2	1223.2	1223.2	1223.2
2.5°	1222.6	1233.7	1248.1	1249.7	1250.8
5°	1215.4	1238.1	1211.6	1236.5	1249.7
7.5°	1198.9	1212.7	1232.0	1207.2	1214.3
10°	1190.6	1193.9	1193.9	1224.9	1218.8
12.5°	1171.8	1193.9	1199.4	1193.3	1206.6
15°	1162.4	1169.6	1171.2	1188.9	1190.0
17.5°	1151.9	1150.2	1146.3	1159.0	1181.7
20°	1124.8	1118.7	1130.3	1145.8	1154.6
22.5°	1084.9	1086.6	1100.4	1113.1	1123.1
25°	1038.5	1046.8	1067.8	1082.7	1089.9
27.5°	1003.7	1015.8	1030.2	1047.9	1062.3
30°	976.0	974.9	984.9	1010.3	1026.9
32.5°	922.4	926.2	936.7	967.2	990.4
35°	868.2	868.7	879.2	919.1	941.7
37.5°	805.7	801.3	807.4	850.5	865.4
40°	719.4	720.5	714.4	744.9	742.7
42.5°	618.8	627.6	596.1	635.9	633.2
45°	496.0	536.4	497.1	532.5	511.0
47.5°	391.5	451.2	418.6	444.6	404.2
50°	317.4	378.8	361.1	372.7	307.5
52.5°	260.5	310.2	315.8	318.5	240.0
55°	209.0	254.4	272.1	271.5	187.5
57.5°	154.3	206.8	227.3	235.6	142.1
60°	113.9	172.0	187.5	205.7	106.7
62.5°	91.8	151.0	154.8	180.3	81.3
65°	78.5	139.4	125.5	160.9	63.0
67.5°	69.7	130.0	102.3	143.8	53.6
70°	63.0	115.6	84.6	128.8	50.3
72.5°	61.4	98.4	65.3	115.0	49.8
75°	59.2	83.5	47.0	94.6	49.2
77.5°	50.9	71.3	33.7	73.0	45.9
80°	44.2	57.0	24.9	54.7	40.4
82.5°	34.3	43.1	22.1	41.5	32.6
85°	22.1	32.6	23.2	29.9	22.7
87.5°	10.5	18.2	16.6	16.0	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)