

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: P292522

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292522
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-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2271.0 lumens
Efficiency: N/A
Efficacy: 125.2 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

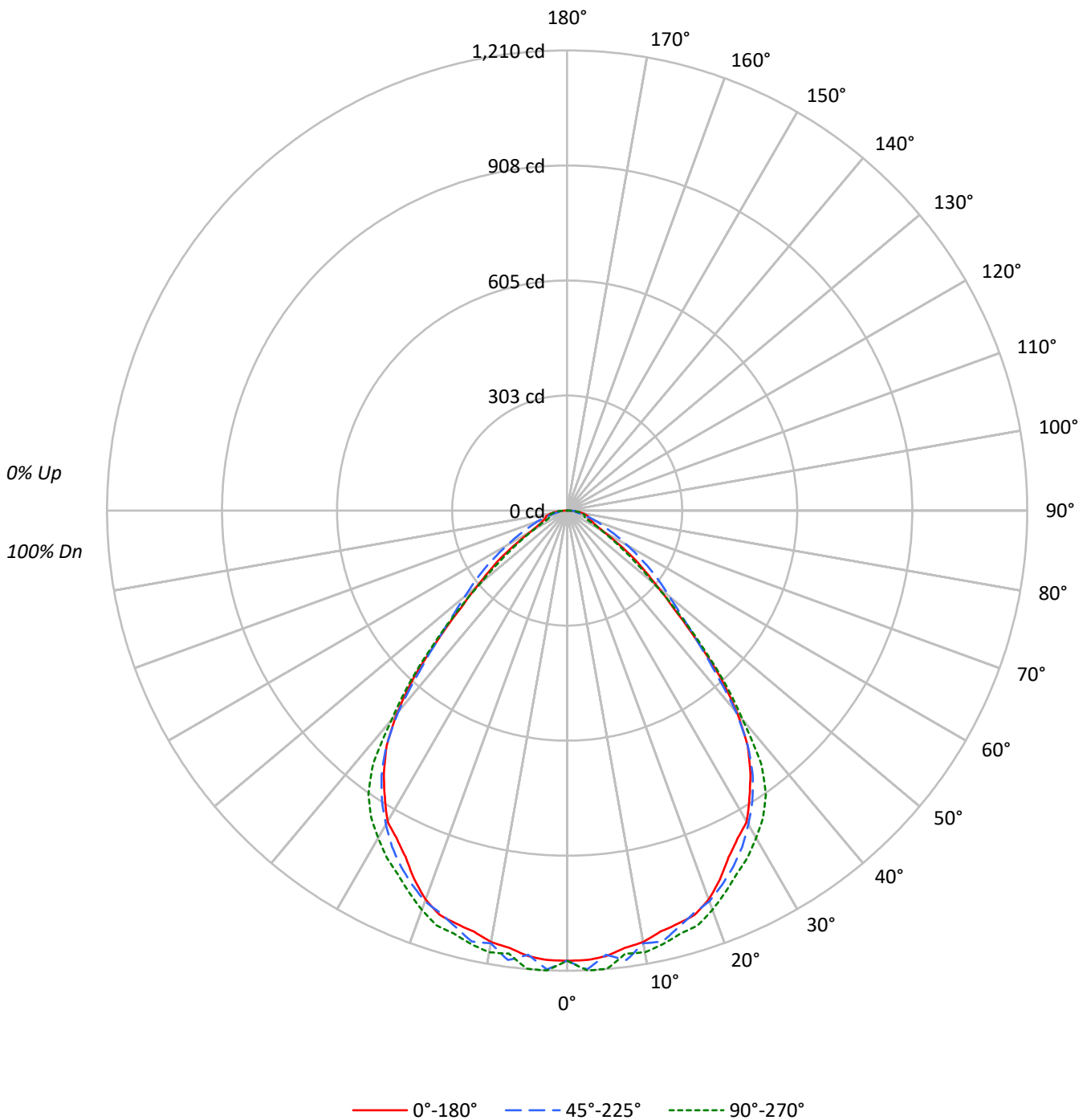
Input Watts (W): 18.135
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3185	3185	3185
5°	3177	3167	3267
10°	3148	3157	3222
15°	3133	3157	3208
20°	3117	3132	3199
25°	2984	3068	3131
30°	2935	2961	3087
35°	2760	2795	2993
40°	2445	2428	2524
45°	1827	1831	1881
50°	1286	1463	1245
55°	949	1235	851
60°	593	976	556
65°	484	774	388
70°	480	644	383
75°	596	473	495
80°	663	373	606
85°	661	695	676



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	5.0
10°-20°	320.9	14.1
20°-30°	475.3	20.9
30°-40°	532.4	23.4
40°-50°	391.2	17.2
50°-60°	218.7	9.6
60°-70°	121.9	5.4
70°-80°	71.6	3.2
80°-90°	26.3	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°	908.9	40.0
0°-40°	1441.3	63.5
0°-60°	2051.2	90.3
0°-90°	2271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1176	1198	1172	1196	1209	111
15°	1125	1132	1133	1150	1152	318
25°	1005	1013	1033	1048	1055	466
35°	840	841	851	889	911	520
45°	480	519	481	515	494	375
55°	202	246	263	263	181	180
65°	76	135	122	156	61	79
75°	57	81	46	92	48	58
85°	21	32	22	29	22	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1183.6	1183.6	1183.6	1183.6	<i>1183.6</i>
2.5°	<i>1183.0</i>	<i>1193.7</i>	<i>1207.7</i>	<i>1209.3</i>	<i>1210.3</i>
5°	1176.1	1198.0	1172.3	1196.4	<i>1209.3</i>
7.5°	1160.0	1173.4	1192.1	1168.1	<i>1175.0</i>
10°	1152.0	1155.2	1155.2	1185.2	<i>1179.3</i>
12.5°	1133.8	1155.2	1160.6	1154.7	<i>1167.5</i>
15°	1124.7	1131.7	1133.3	1150.4	<i>1151.5</i>
17.5°	1114.6	1113.0	1109.2	1121.5	<i>1143.5</i>
20°	1088.3	1082.5	1093.7	1108.7	<i>1117.2</i>
22.5°	1049.8	1051.4	1064.8	1077.1	<i>1086.7</i>
25°	1004.9	1012.9	1033.2	1047.7	<i>1054.6</i>
27.5°	971.2	982.9	996.8	1014.0	<i>1027.9</i>
30°	944.4	943.3	953.0	977.6	<i>993.6</i>
32.5°	892.5	896.2	906.4	935.8	<i>958.3</i>
35°	840.1	840.6	850.8	889.3	<i>911.2</i>
37.5°	779.6	775.3	781.2	822.9	<i>837.4</i>
40°	696.1	697.2	691.3	720.7	<i>718.6</i>
42.5°	598.7	607.3	576.8	615.3	<i>612.7</i>
45°	480.0	519.0	481.0	515.3	<i>494.4</i>
47.5°	378.8	436.6	405.1	430.2	<i>391.1</i>
50°	307.1	366.5	349.4	360.6	<i>297.5</i>
52.5°	252.0	300.2	305.5	308.2	<i>232.2</i>
55°	202.3	246.1	263.3	262.7	<i>181.4</i>
57.5°	149.3	200.1	219.9	227.9	<i>137.5</i>
60°	110.2	166.4	181.4	199.0	<i>103.3</i>
62.5°	88.8	146.1	149.8	174.4	<i>78.7</i>
65°	76.0	134.8	121.5	155.7	<i>61.0</i>
67.5°	67.4	125.7	99.0	139.1	<i>51.9</i>
70°	61.0	111.8	81.9	124.7	<i>48.7</i>
72.5°	59.4	95.2	63.1	111.3	<i>48.2</i>
75°	57.3	80.8	45.5	91.5	<i>47.6</i>
77.5°	49.2	69.0	32.6	70.6	<i>44.4</i>
80°	42.8	55.1	24.1	53.0	<i>39.1</i>
82.5°	33.2	41.7	21.4	40.1	<i>31.6</i>
85°	21.4	31.6	22.5	28.9	<i>21.9</i>
87.5°	10.2	17.7	16.1	15.5	<i>11.2</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)