

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: P292422

Luminaire Tested: **22GR-LD5-20-A125-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292422  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33297)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-20-A125-UNV-L93050-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A125 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1933.0 lumens  
Efficiency: N/A  
Efficacy: 120.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.22 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

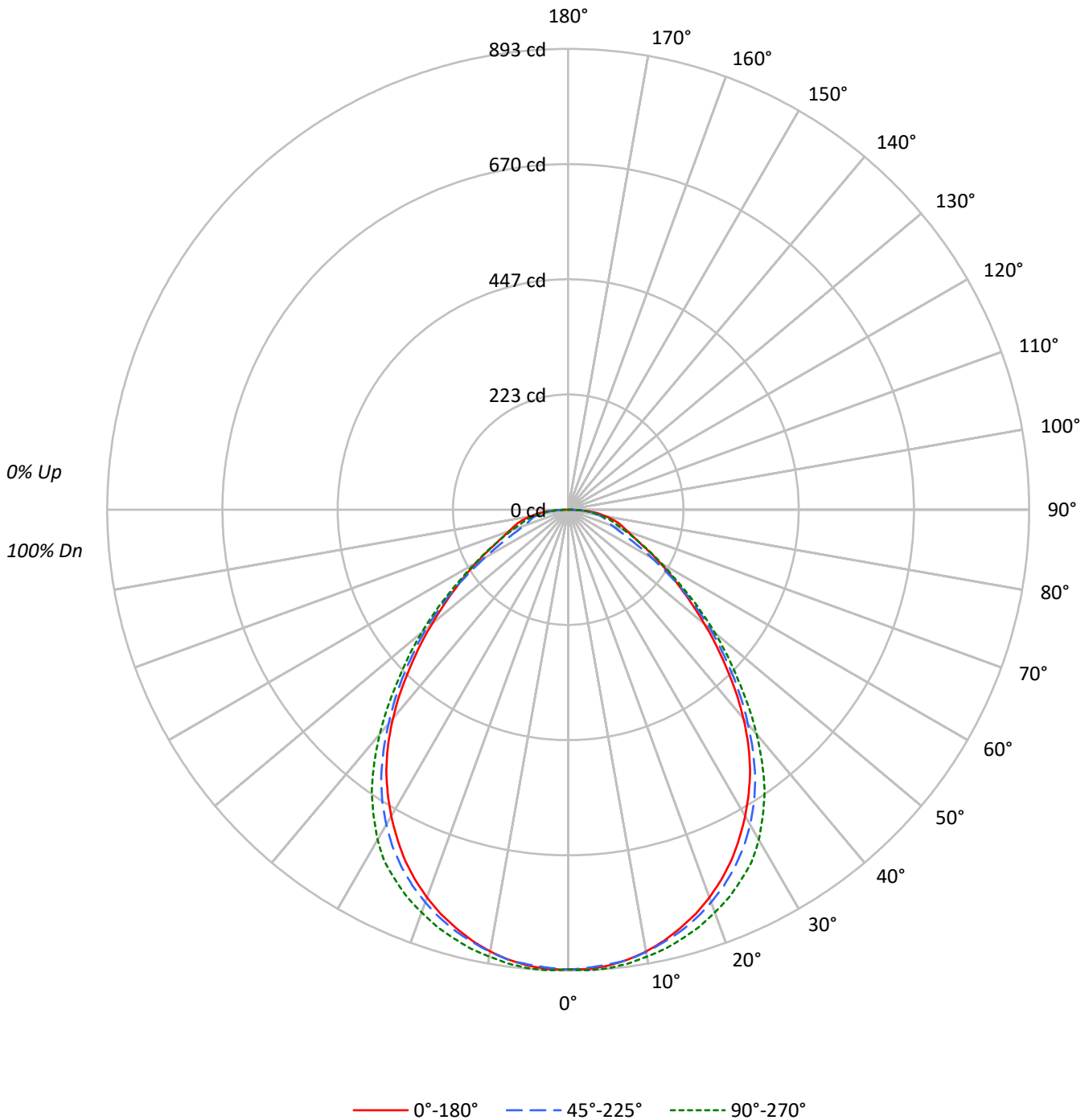
Input Watts (W): 16.089  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292422

CATALOG NUMBER: 22GR-LD5-20-A125-UNV-L93050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P292422

CATALOG NUMBER: 22GR-LD5-20-A125-UNV-L93050-W2A1-U-4500K

**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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86					86			
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74					74			
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49					49			
6	74	61	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29					29			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2398	2398	2398
5°	2396	2390	2409
10°	2376	2378	2403
15°	2338	2354	2394
20°	2290	2319	2379
25°	2223	2268	2351
30°	2130	2190	2295
35°	2018	2074	2179
40°	1855	1901	1996
45°	1648	1708	1770
50°	1440	1506	1551
55°	1252	1269	1315
60°	1101	1009	1123
65°	979	806	984
70°	961	716	908
75°	1050	787	927
80°	1153	936	992
85°	1377	1087	1115



TEST NUMBER: P292422

CATALOG NUMBER: 22GR-LD5-20-A125-UNV-L93050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.2	4.4
10°-20°	238.8	12.4
20°-30°	352.5	18.2
30°-40°	394.5	20.4
40°-50°	346.4	17.9
50°-60°	245.1	12.7
60°-70°	142.7	7.4
70°-80°	88.9	4.6
80°-90°	39.8	2.1
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°	675.6	34.9
0°-40°	1070.1	55.4
0°-60°	1661.6	86.0
0°-90°	1933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	887	885	885	889	892	84
15°	839	841	845	854	860	236
25°	749	752	764	782	792	344
35°	614	617	631	650	663	382
45°	433	438	449	460	465	335
55°	267	272	270	275	280	241
65°	154	142	127	138	155	156
75°	101	87	76	78	89	105
85°	45	46	35	34	36	45
90°	0	0	0	0	0	



TEST NUMBER: P292422

CATALOG NUMBER: 22GR-LD5-20-A125-UNV-L93050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	891.0	891.0	891.0	891.0	891.0
2.5°	891.0	889.2	888.3	891.5	893.3
5°	887.0	884.7	884.7	889.2	891.9
7.5°	879.7	877.5	880.2	884.3	887.0
10°	869.4	868.5	870.3	875.7	879.3
12.5°	855.9	856.3	858.1	866.7	871.2
15°	839.2	841.0	845.0	854.1	859.5
17.5°	821.2	822.5	828.8	839.2	846.8
20°	799.5	802.2	809.9	823.0	830.6
22.5°	775.6	778.8	788.3	804.0	813.5
25°	748.6	751.8	763.9	781.9	791.9
27.5°	718.0	722.9	736.4	756.3	769.8
30°	685.5	689.6	704.9	727.4	738.7
32.5°	650.8	655.8	670.2	691.8	701.7
35°	614.3	617.0	631.4	650.3	663.4
37.5°	572.8	574.2	587.7	605.3	617.0
40°	528.2	529.1	541.3	558.0	568.3
42.5°	481.8	482.2	495.3	507.9	516.9
45°	433.1	438.1	448.9	459.7	465.1
47.5°	389.4	393.0	402.9	412.4	417.3
50°	343.9	352.9	359.7	364.6	370.5
52.5°	304.7	312.3	314.1	320.0	324.9
55°	266.8	272.2	270.4	275.4	280.3
57.5°	234.8	232.1	226.2	234.8	241.1
60°	204.6	197.4	187.5	199.2	208.7
62.5°	177.6	165.9	153.7	165.4	181.2
65°	153.7	141.5	126.6	137.9	154.6
67.5°	135.7	123.0	105.5	116.7	133.4
70°	122.1	109.1	91.0	100.5	115.4
72.5°	111.3	97.3	81.6	87.9	100.5
75°	101.0	87.0	75.7	77.5	89.2
77.5°	88.8	78.4	69.4	68.5	77.5
80°	74.4	71.2	60.4	59.0	64.0
82.5°	61.3	59.9	49.6	48.2	50.0
85°	44.6	46.4	35.2	34.3	36.1
87.5°	23.4	25.7	18.5	19.4	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)