

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: P291733

Luminaire Tested: **22GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291733
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1965.0 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

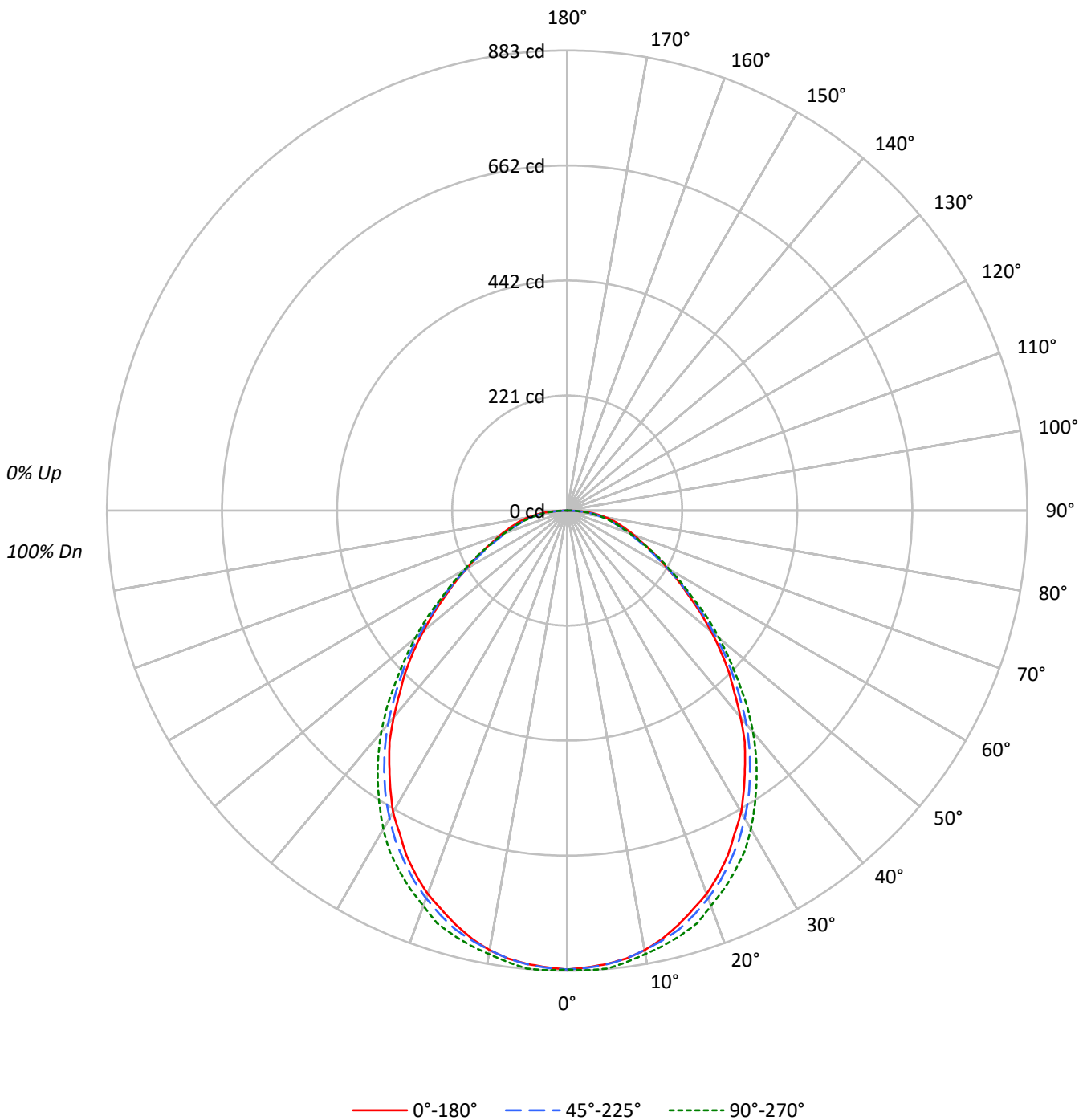
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291733

CATALOG NUMBER: 22GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P291733

CATALOG NUMBER: 22GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K

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	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2370	2370	2370
5°	2359	2361	2384
10°	2341	2340	2362
15°	2293	2316	2350
20°	2241	2267	2311
25°	2167	2202	2263
30°	2076	2118	2192
35°	1954	2010	2082
40°	1819	1880	1949
45°	1670	1717	1771
50°	1506	1544	1593
55°	1336	1368	1391
60°	1197	1200	1224
65°	1103	1066	1103
70°	1065	987	1016
75°	1084	967	986
80°	1168	1013	1013
85°	1297	1074	1059



TEST NUMBER: P291733

CATALOG NUMBER: 22GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.1	4.2
10°-20°	234.3	11.9
20°-30°	341.9	17.4
30°-40°	382.8	19.5
40°-50°	348.4	17.7
50°-60°	262.2	13.3
60°-70°	171.1	8.7
70°-80°	102.6	5.2
80°-90°	38.5	2.0
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°	659.3	33.6
0°-40°	1042.1	53.0
0°-60°	1652.8	84.1
0°-90°	1965.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1965.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	873	872	874	877	882	83
15°	823	824	831	838	844	232
25°	730	732	742	755	762	335
35°	595	600	612	626	634	372
45°	439	443	451	461	465	338
55°	285	289	292	296	296	257
65°	173	172	167	170	173	173
75°	104	101	93	93	95	111
85°	42	41	35	33	34	43
90°	0	0	0	0	0	



TEST NUMBER: P291733

CATALOG NUMBER: 22GR-LD5-20-F1-UNV-L83050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	880.6	880.6	880.6	880.6	880.6
2.5°	877.4	876.9	878.3	880.6	882.8
5°	873.3	872.0	874.2	877.4	882.4
7.5°	867.0	867.0	867.0	872.9	873.8
10°	856.6	857.5	856.2	862.1	864.3
12.5°	841.7	842.2	844.9	850.8	854.8
15°	823.2	824.1	831.4	838.1	843.5
17.5°	802.5	805.6	812.4	823.2	830.0
20°	782.6	786.2	791.6	803.4	807.0
22.5°	757.3	761.4	768.2	778.6	786.2
25°	729.8	732.1	741.5	755.1	762.3
27.5°	696.9	701.8	713.6	727.6	737.5
30°	668.0	670.7	681.5	697.8	705.4
32.5°	631.4	639.5	648.6	663.0	670.2
35°	594.9	600.3	612.0	626.5	633.7
37.5°	559.7	562.8	574.6	586.7	595.8
40°	517.7	523.6	535.3	548.4	554.7
42.5°	475.7	484.3	492.0	505.0	511.8
45°	438.7	443.2	451.3	460.8	465.3
47.5°	399.9	402.1	411.6	417.5	422.5
50°	359.7	362.4	368.7	374.6	380.5
52.5°	322.7	325.0	329.0	334.4	340.3
55°	284.8	288.9	291.6	295.6	296.5
57.5°	254.1	253.7	255.5	258.6	261.8
60°	222.5	223.4	223.0	226.1	227.5
62.5°	196.3	195.9	193.2	197.7	201.3
65°	173.3	171.5	167.4	170.2	173.3
67.5°	152.1	151.2	144.4	146.7	149.4
70°	135.4	132.2	125.5	126.8	129.1
72.5°	119.2	115.5	108.8	109.2	110.6
75°	104.3	100.6	93.0	93.4	94.8
77.5°	90.3	85.8	79.0	78.1	79.0
80°	75.4	71.3	65.4	62.7	65.4
82.5°	60.0	57.8	51.0	48.3	49.2
85°	42.0	40.6	34.8	32.9	34.3
87.5°	19.4	20.8	17.6	16.2	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)