

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: P291760

Luminaire Tested: **22GR-LD5-40-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291760
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-LD5-40-F1-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4282.0 lumens
Efficiency: N/A
Efficacy: 129.3 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

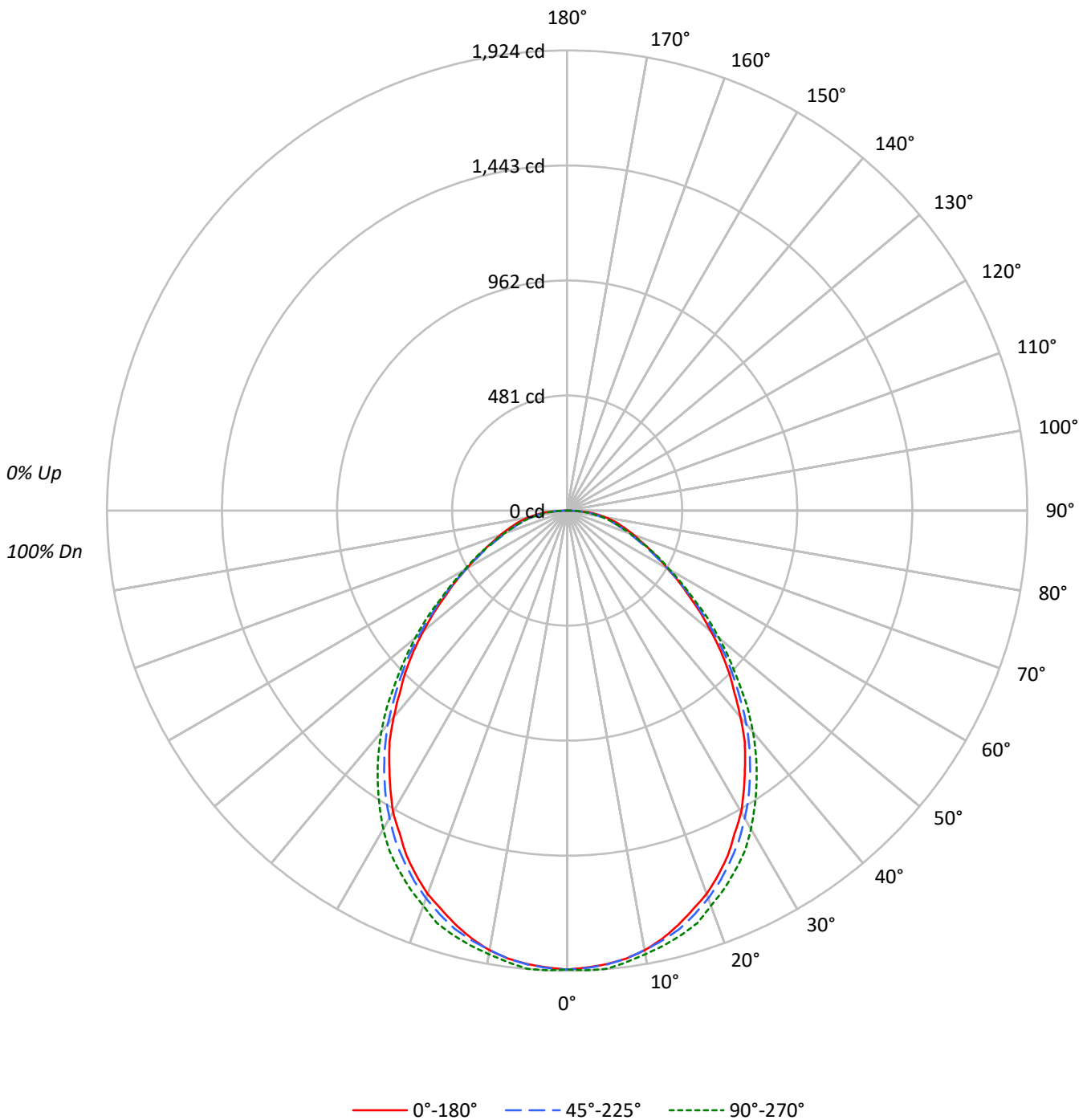
Input Watts (W): 33.108
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5164	5164	5164
5°	5141	5146	5194
10°	5101	5098	5146
15°	4998	5047	5121
20°	4884	4940	5036
25°	4722	4798	4932
30°	4523	4615	4777
35°	4258	4381	4536
40°	3963	4098	4246
45°	3638	3743	3859
50°	3282	3364	3471
55°	2912	2981	3032
60°	2610	2615	2668
65°	2405	2323	2405
70°	2322	2151	2213
75°	2362	2106	2147
80°	2545	2210	2210
85°	2825	2337	2306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	4.2
10°-20°	510.5	11.9
20°-30°	745.1	17.4
30°-40°	834.2	19.5
40°-50°	759.2	17.7
50°-60°	571.4	13.3
60°-70°	372.9	8.7
70°-80°	223.6	5.2
80°-90°	83.9	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°	1436.7	33.6
0°-40°	2270.9	53.0
0°-60°	3601.6	84.1
0°-90°	4282.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4282.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1903	1900	1905	1912	1923	181
15°	1794	1796	1812	1826	1838	505
25°	1590	1595	1616	1645	1661	730
35°	1296	1308	1334	1365	1381	810
45°	956	966	984	1004	1014	736
55°	621	630	635	644	646	561
65°	378	374	365	371	378	378
75°	227	219	203	204	206	241
85°	92	88	76	72	75	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1918.9	1918.9	1918.9	1918.9	1918.9
2.5°	1912.0	1911.0	1913.9	1918.9	1923.8
5°	1903.1	1900.2	1905.1	1912.0	1922.8
7.5°	1889.4	1889.4	1889.4	1902.1	1904.1
10°	1866.7	1868.7	1865.7	1878.5	1883.4
12.5°	1834.3	1835.3	1841.2	1853.9	1862.8
15°	1793.9	1795.9	1811.7	1826.4	1838.2
17.5°	1748.7	1755.6	1770.3	1793.9	1808.7
20°	1705.4	1713.3	1725.1	1750.7	1758.5
22.5°	1650.4	1659.2	1674.0	1696.6	1713.3
25°	1590.4	1595.3	1615.9	1645.4	1661.2
27.5°	1518.6	1529.4	1555.0	1585.4	1607.1
30°	1455.6	1461.5	1485.1	1520.5	1537.2
32.5°	1376.0	1393.7	1413.3	1444.8	1460.5
35°	1296.3	1308.1	1333.7	1365.1	1380.9
37.5°	1219.6	1226.5	1252.0	1278.6	1298.3
40°	1128.1	1140.9	1166.5	1195.0	1208.8
42.5°	1036.6	1055.3	1072.0	1100.6	1115.3
45°	956.0	965.8	983.5	1004.2	1014.0
47.5°	871.4	876.3	897.0	909.8	920.6
50°	783.9	789.8	803.5	816.3	829.1
52.5°	703.2	708.1	717.0	728.8	741.6
55°	620.6	629.5	635.4	644.2	646.2
57.5°	553.7	552.7	556.7	563.6	570.4
60°	484.9	486.8	485.9	492.7	495.7
62.5°	427.8	426.8	420.9	430.8	438.7
65°	377.7	373.7	364.9	370.8	377.7
67.5°	331.4	329.5	314.7	319.6	325.5
70°	295.1	288.2	273.4	276.4	281.3
72.5°	259.7	251.8	237.0	238.0	241.0
75°	227.2	219.3	202.6	203.6	206.5
77.5°	196.7	186.9	172.1	170.1	172.1
80°	164.2	155.4	142.6	136.7	142.6
82.5°	130.8	125.9	111.1	105.2	107.2
85°	91.5	88.5	75.7	71.8	74.7
87.5°	42.3	45.2	38.4	35.4	36.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)