

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: P272016

Luminaire Tested: **22CZ2-20-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272016
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

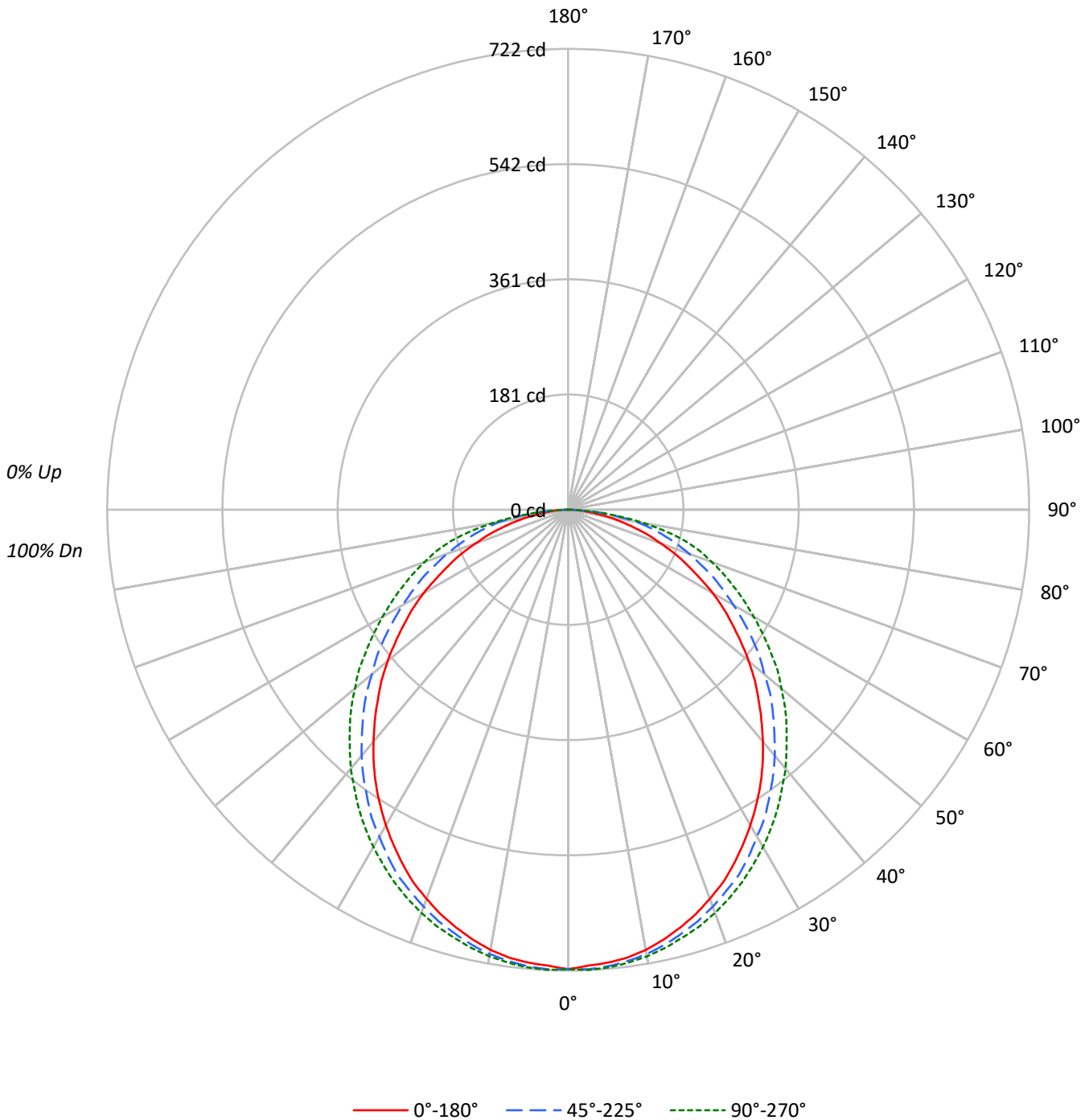
Lumens per Lamp: N/A
Luminaire Lumens: 2009.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 17.9
Input Voltage (V): NR
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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1937	1937	1937
5°	1924	1940	1945
10°	1913	1931	1941
15°	1888	1914	1932
20°	1857	1895	1925
25°	1820	1876	1912
30°	1774	1838	1896
35°	1724	1804	1878
40°	1666	1768	1860
45°	1605	1727	1841
50°	1546	1680	1825
55°	1473	1649	1812
60°	1407	1609	1806
65°	1313	1599	1826
70°	1209	1585	1880
75°	1092	1608	1979
80°	944	1657	1860
85°	781	1389	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	3.4
10°-20°	193.7	9.6
20°-30°	289.9	14.4
30°-40°	343.3	17.1
40°-50°	349.9	17.4
50°-60°	313.6	15.6
60°-70°	245.5	12.2
70°-80°	158.3	7.9
80°-90°	46.8	2.3
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°	551.7	27.5
0°-40°	895.0	44.5
0°-60°	1558.4	77.6
0°-90°	2009.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2009.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	712	714	718	719	720	68
15°	678	682	687	693	694	191
25°	613	619	632	640	644	282
35°	525	532	549	566	572	328
45°	422	431	454	477	484	326
55°	314	324	352	376	386	282
65°	206	218	251	276	287	205
75°	105	121	155	181	190	113
85°	25	35	45	45	45	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.9	719.9	719.9	719.9	719.9
2.5°	715.2	717.1	720.8	721.8	721.8
5°	712.4	714.3	718.0	718.9	719.9
7.5°	707.7	708.6	713.3	715.2	716.1
10°	700.2	702.1	706.8	709.6	710.5
12.5°	689.9	692.7	698.3	702.1	703.0
15°	677.7	681.5	687.1	692.7	693.6
17.5°	664.6	668.3	675.8	682.4	684.3
20°	648.6	653.3	661.8	669.3	672.1
22.5°	632.7	636.5	646.8	656.1	659.0
25°	613.0	618.7	631.8	640.2	644.0
27.5°	592.4	599.0	612.1	623.3	627.1
30°	570.8	577.4	591.5	605.5	610.2
32.5°	548.4	555.9	572.7	586.8	591.5
35°	524.9	531.5	549.3	566.2	571.8
37.5°	500.5	506.2	526.8	544.6	550.2
40°	474.3	481.8	503.4	524.0	529.6
42.5°	448.1	456.5	478.1	500.5	506.2
45°	421.8	431.2	453.7	477.1	483.7
47.5°	396.5	404.0	429.3	451.8	461.2
50°	369.3	376.8	401.2	426.5	435.9
52.5°	341.2	351.5	377.8	402.1	413.4
55°	314.0	324.3	351.5	375.9	386.2
57.5°	288.7	297.1	325.3	350.6	360.9
60°	261.5	269.0	299.0	326.2	335.6
62.5°	232.5	243.7	274.6	300.0	311.2
65°	206.2	218.4	251.2	275.6	286.8
67.5°	181.8	193.1	225.0	251.2	263.4
70°	153.7	168.7	201.5	227.8	239.0
72.5°	131.2	144.4	178.1	204.3	216.5
75°	105.0	120.9	154.7	180.9	190.3
77.5°	83.4	99.4	131.2	151.9	156.5
80°	60.9	76.9	106.9	117.2	120.0
82.5°	41.2	56.2	76.9	79.7	80.6
85°	25.3	34.7	45.0	45.0	45.0
87.5°	12.2	14.1	15.9	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)