

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: P271968

Luminaire Tested: **22CZ2-20HE-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: P271968
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (112) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1853.0 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

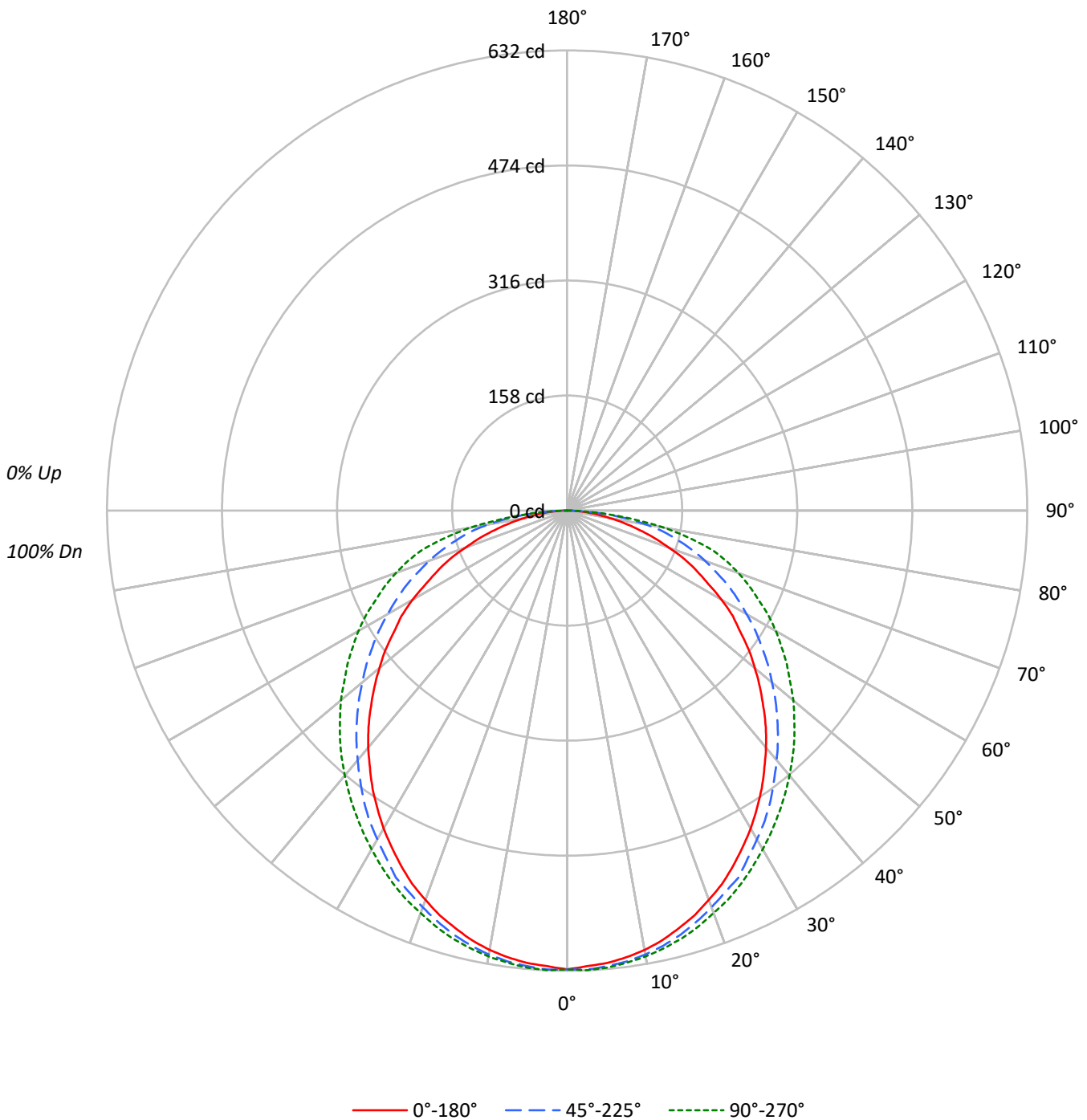
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90		92	90	87		89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61		70	65	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34		46	39	34		45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31		42	35	30		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	27		38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1696	1696	1696
5°	1685	1697	1702
10°	1674	1692	1699
15°	1654	1679	1694
20°	1629	1661	1684
25°	1600	1651	1678
30°	1567	1620	1669
35°	1531	1600	1666
40°	1493	1573	1669
45°	1450	1555	1679
50°	1409	1539	1699
55°	1361	1531	1728
60°	1320	1531	1781
65°	1254	1556	1847
70°	1169	1585	1965
75°	1071	1640	2123
80°	933	1709	2091
85°	815	1519	1661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	3.2
10°-20°	169.7	9.2
20°-30°	254.8	13.7
30°-40°	304.4	16.4
40°-50°	316.6	17.1
50°-60°	293.4	15.8
60°-70°	240.7	13.0
70°-80°	162.7	8.8
80°-90°	51.1	2.8
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°	484.1	26.1
0°-40°	788.5	42.6
0°-60°	1398.5	75.5
0°-90°	1853.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1853.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	624	625	628	629	630	59
15°	594	596	603	606	608	167
25°	539	543	556	563	565	248
35°	466	472	487	502	507	291
45°	381	388	408	432	441	294
55°	290	299	326	356	368	261
65°	197	208	244	276	290	195
75°	103	120	158	190	204	109
85°	26	36	49	55	54	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	630.1	630.1	630.1	630.1	630.1
2.5°	626.4	628.2	631.0	631.9	631.9
5°	623.7	624.6	628.2	629.1	630.1
7.5°	619.1	620.9	624.6	625.5	626.4
10°	612.7	614.6	619.1	620.9	621.8
12.5°	604.5	606.3	611.8	614.6	615.5
15°	593.6	596.3	602.7	606.3	608.2
17.5°	582.6	585.4	591.8	597.2	599.1
20°	569.0	575.3	579.9	587.2	588.1
22.5°	555.3	558.9	567.1	574.4	578.1
25°	538.9	543.4	556.2	562.6	565.3
27.5°	521.5	527.9	538.0	548.0	551.6
30°	504.2	508.8	521.5	533.4	537.1
32.5°	485.1	491.5	505.1	517.0	522.5
35°	465.9	472.3	486.9	501.5	507.0
37.5°	445.0	452.3	466.8	484.2	491.5
40°	424.9	430.4	447.7	468.7	475.0
42.5°	403.9	410.3	428.5	451.3	458.6
45°	381.1	388.4	408.5	432.2	441.3
47.5°	359.2	366.5	388.4	412.1	423.1
50°	336.5	345.6	367.5	394.8	405.8
52.5°	314.6	322.8	347.4	375.7	385.7
55°	290.0	299.1	326.4	355.6	368.4
57.5°	269.9	276.3	306.4	336.5	349.2
60°	245.3	253.5	284.5	316.4	331.0
62.5°	218.8	232.5	264.4	297.2	311.8
65°	196.9	207.9	244.4	276.3	290.0
67.5°	174.2	186.0	221.6	255.3	270.8
70°	148.6	164.1	201.5	235.2	249.8
72.5°	125.8	142.2	180.5	213.4	228.9
75°	103.0	120.4	157.7	189.7	204.2
77.5°	81.2	100.3	136.8	161.4	170.5
80°	60.2	78.4	110.3	127.7	134.9
82.5°	41.9	57.4	81.2	90.3	92.1
85°	26.4	36.5	49.2	54.7	53.8
87.5°	11.9	14.6	18.2	20.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)