

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: P274732

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L935-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: P274732
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-RDP-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1157.0 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

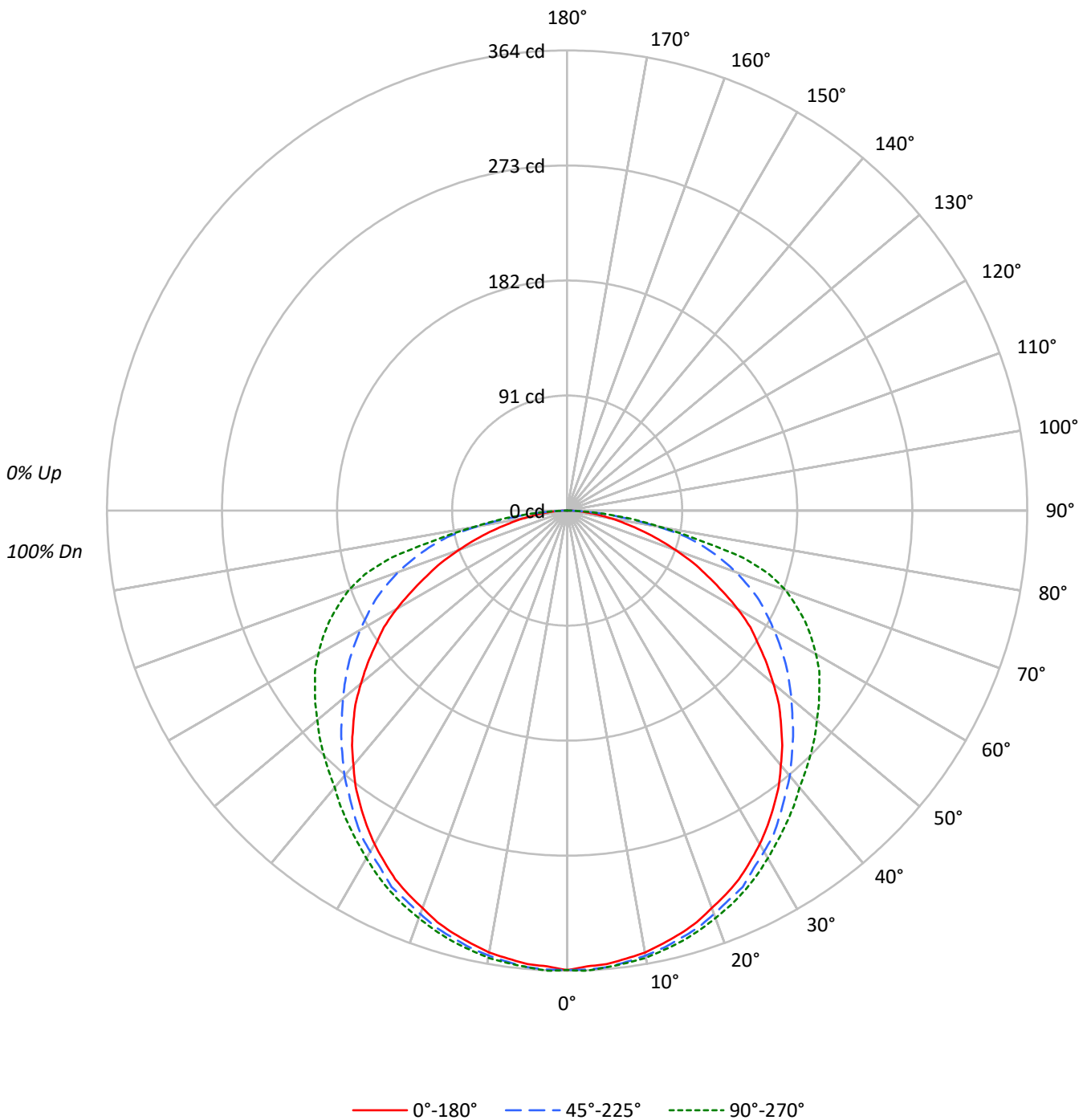
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82	82	
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67	67	
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55	55	
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47	47	
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40	40	
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35	35	
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31	31	
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27	27	
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24	24	
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22	22	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	978	978	978
5°	972	979	979
10°	970	977	982
15°	965	975	982
20°	958	973	982
25°	955	975	985
30°	947	968	987
35°	937	964	993
40°	924	963	1005
45°	910	962	1037
50°	891	969	1080
55°	867	990	1142
60°	839	1017	1223
65°	781	1068	1323
70°	717	1118	1446
75°	628	1177	1495
80°	541	1120	1175
85°	472	815	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	3.0
10°-20°	98.7	8.5
20°-30°	150.6	13.0
30°-40°	183.9	15.9
40°-50°	196.6	17.0
50°-60°	189.8	16.4
60°-70°	163.4	14.1
70°-80°	110.5	9.6
80°-90°	29.2	2.5
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°	283.7	24.5
0°-40°	467.6	40.4
0°-60°	854.0	73.8
0°-90°	1157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1157.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	363	363	363	363	363	
5°	360	361	363	363	363	34
15°	346	347	350	352	352	98
25°	322	323	328	330	332	148
35°	285	288	294	300	302	178
45°	239	243	253	266	272	185
55°	185	191	211	232	243	166
65°	123	134	168	194	208	122
75°	60	80	113	136	144	65
85°	15	21	26	27	29	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	363.4	363.4	363.4	363.4	363.4
2.5°	360.9	361.7	363.4	363.4	364.3
5°	360.0	360.9	362.6	362.6	362.6
7.5°	357.5	358.3	360.0	360.9	360.9
10°	354.9	355.8	357.5	358.3	359.2
12.5°	350.7	351.5	354.1	355.8	355.8
15°	346.4	347.3	349.8	351.5	352.4
17.5°	341.3	343.0	345.6	347.3	348.1
20°	334.5	336.2	339.6	342.2	343.0
22.5°	328.5	330.2	333.6	336.2	337.9
25°	321.7	323.4	328.5	330.2	331.9
27.5°	313.2	314.9	319.2	322.6	325.1
30°	304.7	306.4	311.5	315.8	317.5
32.5°	295.3	297.9	303.9	307.3	309.8
35°	285.1	287.7	293.6	299.6	302.2
37.5°	274.9	277.5	283.4	291.1	294.5
40°	263.0	266.4	274.1	284.3	286.0
42.5°	251.9	256.2	263.0	274.9	279.2
45°	239.2	243.4	252.8	265.6	272.4
47.5°	227.3	231.5	241.7	257.0	265.6
50°	212.8	218.7	231.5	249.4	257.9
52.5°	199.2	204.3	221.3	240.9	251.1
55°	184.7	190.7	211.1	232.4	243.4
57.5°	171.9	177.0	200.0	223.8	236.6
60°	155.8	162.6	189.0	214.5	227.3
62.5°	138.7	148.9	177.9	204.3	217.9
65°	122.6	134.5	167.7	194.1	207.7
67.5°	108.1	120.9	154.9	183.0	195.8
70°	91.1	107.2	142.1	169.4	183.8
72.5°	75.8	93.6	127.7	154.9	167.7
75°	60.4	80.0	113.2	136.2	143.8
77.5°	46.8	65.5	97.0	103.8	104.7
80°	34.9	51.9	72.3	73.2	75.8
82.5°	23.8	36.6	46.8	51.1	51.9
85°	15.3	21.3	26.4	27.2	28.9
87.5°	6.8	7.7	9.4	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)