

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: P274731

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L930-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: P274731
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-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (112) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1128.7 lumens
Efficiency: N/A
Efficacy: 70.5 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

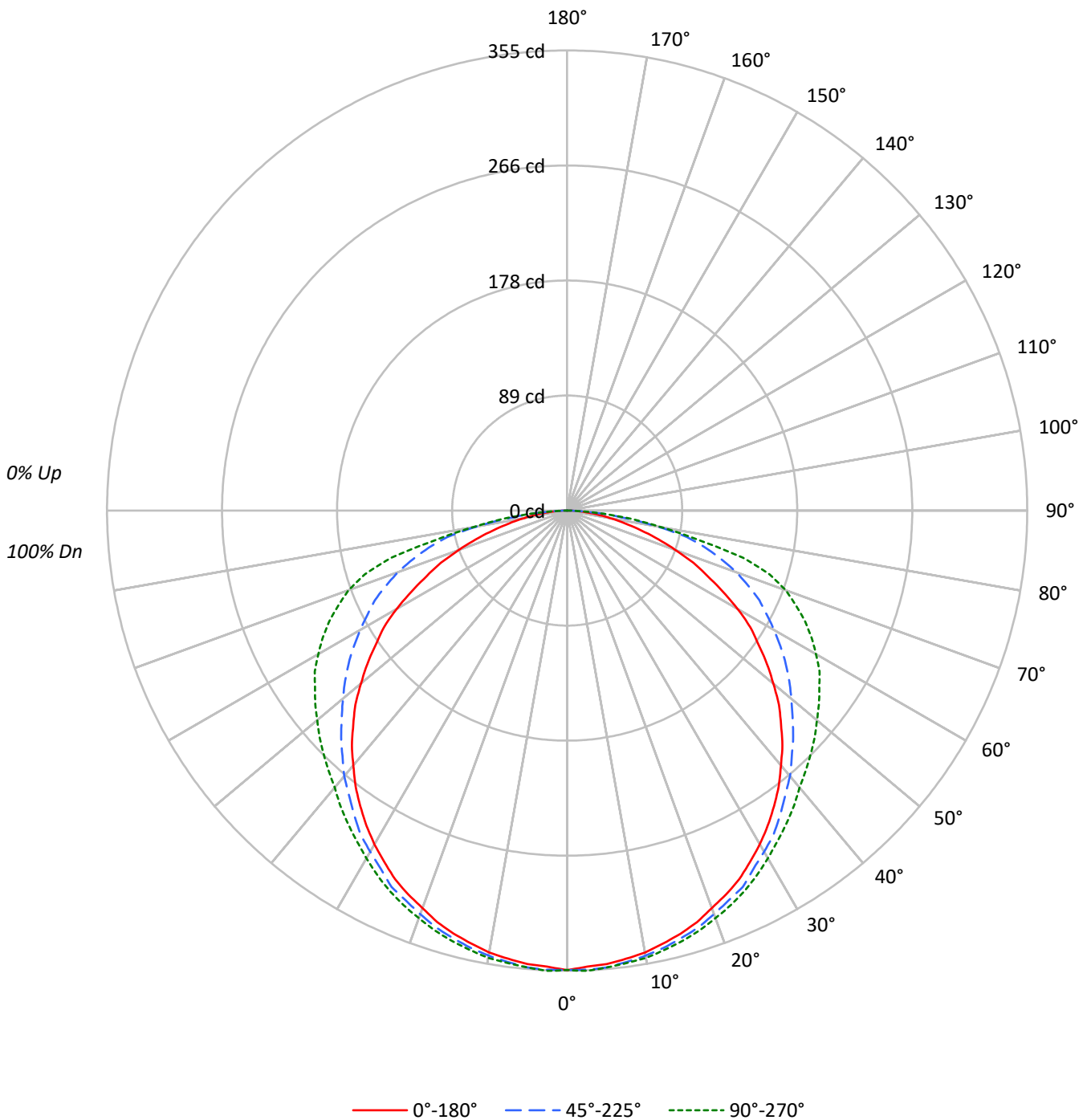
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	954	954	954
5°	949	955	955
10°	946	953	957
15°	941	951	958
20°	934	949	958
25°	932	952	961
30°	924	944	962
35°	914	941	968
40°	901	939	980
45°	888	938	1011
50°	869	945	1053
55°	845	966	1114
60°	818	992	1193
65°	762	1042	1290
70°	699	1091	1411
75°	613	1148	1459
80°	527	1094	1145
85°	460	794	871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	3.0
10°-20°	96.3	8.5
20°-30°	146.9	13.0
30°-40°	179.4	15.9
40°-50°	191.8	17.0
50°-60°	185.1	16.4
60°-70°	159.4	14.1
70°-80°	107.8	9.6
80°-90°	28.4	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°	276.7	24.5
0°-40°	456.1	40.4
0°-60°	833.1	73.8
0°-90°	1128.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1128.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	351	352	354	354	354	33
15°	338	339	341	343	344	95
25°	314	316	320	322	324	144
35°	278	281	286	292	295	174
45°	233	238	247	259	266	180
55°	180	186	206	227	238	161
65°	120	131	164	189	203	119
75°	59	78	110	133	140	63
85°	15	21	26	27	28	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	354.5	354.5	354.5	354.5	354.5
2.5°	352.1	352.9	354.5	354.5	355.4
5°	351.2	352.1	353.7	353.7	353.7
7.5°	348.7	349.6	351.2	352.1	352.1
10°	346.2	347.1	348.7	349.6	350.4
12.5°	342.1	342.9	345.4	347.1	347.1
15°	337.9	338.8	341.3	342.9	343.8
17.5°	333.0	334.6	337.1	338.8	339.6
20°	326.3	328.0	331.3	333.8	334.6
22.5°	320.5	322.2	325.5	328.0	329.6
25°	313.9	315.5	320.5	322.2	323.8
27.5°	305.6	307.2	311.4	314.7	317.2
30°	297.3	298.9	303.9	308.0	309.7
32.5°	288.1	290.6	296.4	299.7	302.2
35°	278.2	280.6	286.5	292.3	294.8
37.5°	268.2	270.7	276.5	284.0	287.3
40°	256.6	259.9	267.4	277.3	279.0
42.5°	245.8	249.9	256.6	268.2	272.3
45°	233.3	237.5	246.6	259.1	265.7
47.5°	221.7	225.8	235.8	250.8	259.1
50°	207.6	213.4	225.8	243.3	251.6
52.5°	194.3	199.3	215.9	235.0	244.9
55°	180.2	186.0	205.9	226.7	237.5
57.5°	167.7	172.7	195.1	218.4	230.8
60°	151.9	158.6	184.3	209.2	221.7
62.5°	135.3	145.3	173.5	199.3	212.6
65°	119.6	131.2	163.6	189.3	202.6
67.5°	105.4	117.9	151.1	178.5	191.0
70°	88.8	104.6	138.7	165.2	179.3
72.5°	73.9	91.3	124.5	151.1	163.6
75°	59.0	78.0	110.4	132.9	140.3
77.5°	45.7	63.9	94.7	101.3	102.1
80°	34.0	50.6	70.6	71.4	73.9
82.5°	23.2	35.7	45.7	49.8	50.6
85°	14.9	20.8	25.7	26.6	28.2
87.5°	6.6	7.5	9.1	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)