

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: P272032

Luminaire Tested: **22CZ2-32-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: P272032
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: 22CZ2-32-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3137.0 lumens
Efficiency: N/A
Efficacy: 117.5 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

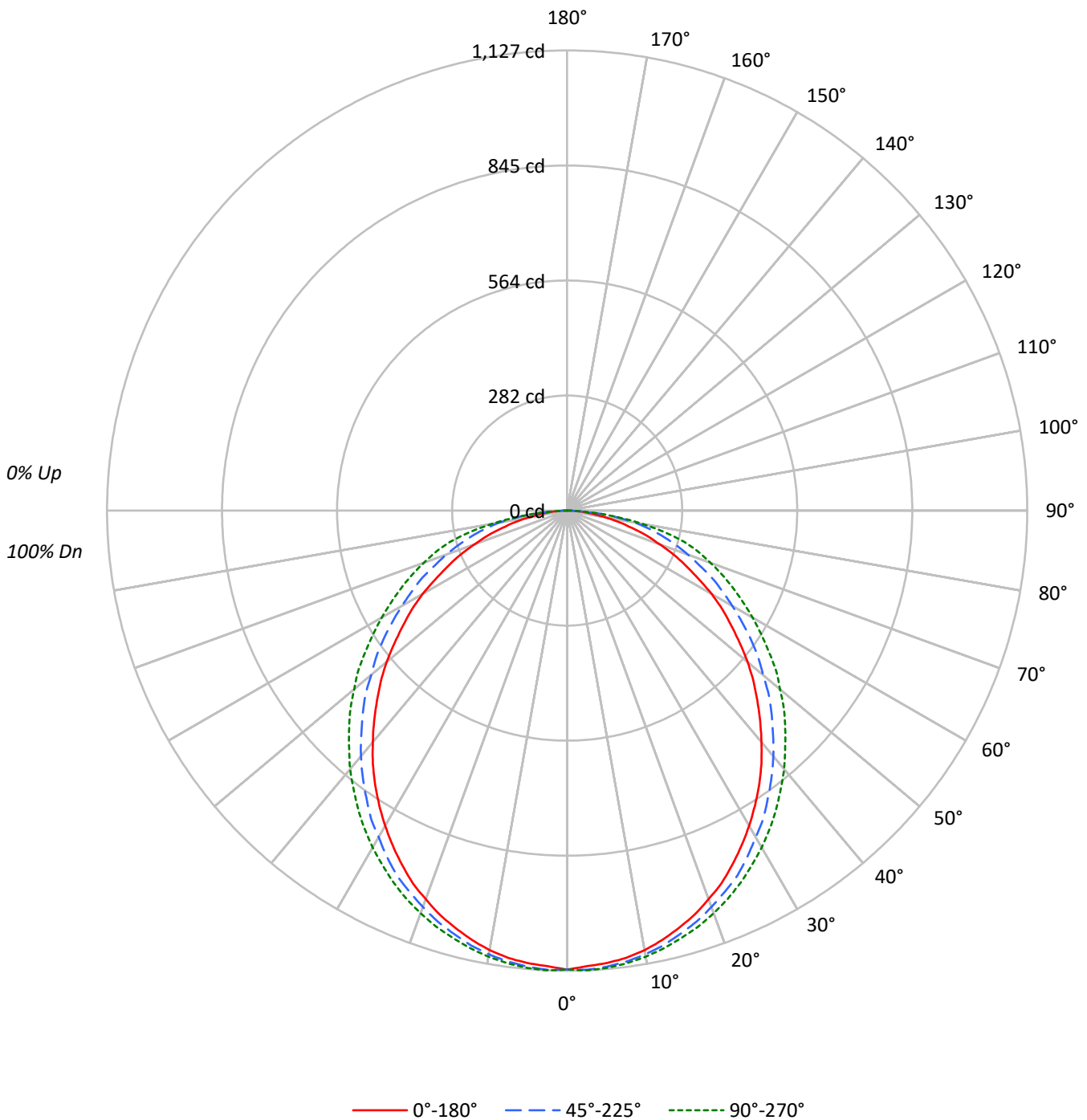
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3025	3025	3025
5°	3005	3029	3036
10°	2987	3016	3031
15°	2948	2989	3017
20°	2900	2959	3005
25°	2842	2929	2985
30°	2770	2870	2961
35°	2692	2818	2933
40°	2602	2761	2905
45°	2506	2696	2874
50°	2414	2622	2849
55°	2300	2575	2829
60°	2198	2513	2820
65°	2050	2498	2852
70°	1888	2476	2936
75°	1704	2511	3089
80°	1474	2586	2903
85°	1220	2171	2171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	3.4
10°-20°	302.5	9.6
20°-30°	452.6	14.4
30°-40°	536.0	17.1
40°-50°	546.3	17.4
50°-60°	489.6	15.6
60°-70°	383.4	12.2
70°-80°	247.2	7.9
80°-90°	73.0	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°	861.5	27.5
0°-40°	1397.5	44.5
0°-60°	2433.4	77.6
0°-90°	3137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3137.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1124	1124	1124	1124	1124	
5°	1112	1115	1121	1123	1124	106
15°	1058	1064	1073	1082	1083	298
25°	957	966	986	1000	1006	441
35°	820	830	858	884	893	512
45°	659	673	708	745	755	509
55°	490	506	549	587	603	440
65°	322	341	392	430	448	320
75°	164	189	242	282	297	176
85°	40	54	70	70	70	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1124.1	1124.1	1124.1	1124.1	1124.1
2.5°	1116.8	1119.7	1125.5	1127.0	1127.0
5°	1112.4	1115.3	1121.2	1122.6	1124.1
7.5°	1105.1	1106.5	1113.8	1116.8	1118.2
10°	1093.3	1096.3	1103.6	1108.0	1109.4
12.5°	1077.2	1081.6	1090.4	1096.3	1097.7
15°	1058.2	1064.1	1072.9	1081.6	1083.1
17.5°	1037.7	1043.6	1055.3	1065.5	1068.5
20°	1012.8	1020.2	1033.3	1045.0	1049.4
22.5°	988.0	993.8	1009.9	1024.6	1028.9
25°	957.2	966.0	986.5	999.7	1005.5
27.5°	925.0	935.3	955.8	973.3	979.2
30°	891.4	901.6	923.6	945.5	952.8
32.5°	856.2	867.9	894.3	916.2	923.6
35°	819.6	829.9	857.7	884.0	892.8
37.5°	781.6	790.4	822.6	850.4	859.2
40°	740.6	752.3	786.0	818.2	827.0
42.5°	699.6	712.8	746.5	781.6	790.4
45°	658.6	673.3	708.4	745.0	755.2
47.5°	619.1	630.8	670.4	705.5	720.1
50°	576.7	588.4	626.4	666.0	680.6
52.5°	532.8	548.9	589.9	627.9	645.5
55°	490.3	506.4	548.9	586.9	603.0
57.5°	450.8	464.0	507.9	547.4	563.5
60°	408.4	420.1	466.9	509.4	524.0
62.5°	363.0	380.5	428.9	468.4	485.9
65°	322.0	341.0	392.3	430.3	447.9
67.5°	283.9	301.5	351.3	392.3	411.3
70°	240.0	263.5	314.7	355.7	373.2
72.5°	204.9	225.4	278.1	319.1	338.1
75°	163.9	188.8	241.5	282.5	297.1
77.5°	130.3	155.1	204.9	237.1	244.4
80°	95.1	120.0	166.9	183.0	187.3
82.5°	64.4	87.8	120.0	124.4	125.9
85°	39.5	54.2	70.3	70.3	70.3
87.5°	19.0	22.0	24.9	23.4	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)