

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: P294842

Luminaire Tested: **22CZ2-29HE-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

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: P294842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-HRP-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (196) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2147.9 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

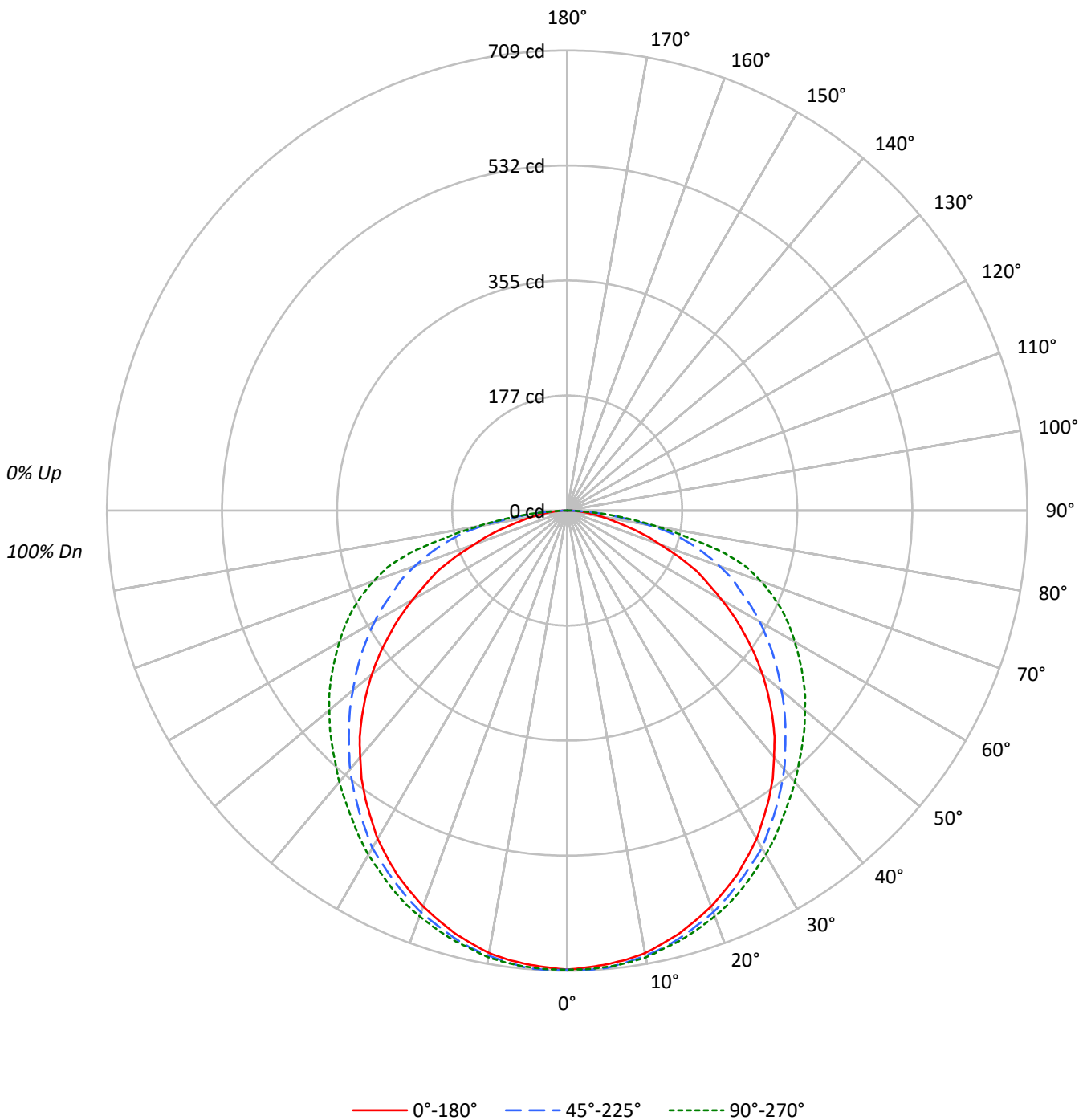
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	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
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1903	1903	1903
5°	1896	1911	1907
10°	1892	1903	1910
15°	1876	1895	1906
20°	1859	1886	1905
25°	1839	1871	1903
30°	1815	1865	1903
35°	1781	1843	1901
40°	1742	1828	1918
45°	1701	1810	1949
50°	1645	1804	2002
55°	1570	1818	2079
60°	1481	1845	2180
65°	1398	1881	2329
70°	1194	1961	2495
75°	1000	2043	2592
80°	818	1974	2163
85°	710	1463	1590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.1
10°-20°	191.7	8.9
20°-30°	290.6	13.5
30°-40°	350.9	16.3
40°-50°	368.7	17.2
50°-60°	346.9	16.2
60°-70°	289.3	13.5
70°-80°	191.7	8.9
80°-90°	51.1	2.4
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°	549.4	25.6
0°-40°	900.3	41.9
0°-60°	1615.9	75.2
0°-90°	2147.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2147.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	702	703	707	707	706	67
15°	673	676	680	683	684	190
25°	619	623	630	638	641	285
35°	542	547	561	573	579	339
45°	447	454	476	500	512	344
55°	335	350	388	427	443	299
65°	220	238	295	344	366	214
75°	96	134	196	237	249	104
85°	23	35	47	52	52	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.3	707.3	707.3	707.3	707.3
2.5°	704.6	705.9	708.6	708.6	707.3
5°	701.9	703.2	707.3	707.3	705.9
7.5°	697.8	699.1	701.9	704.6	703.2
10°	692.4	693.7	696.4	699.1	699.1
12.5°	682.9	684.2	689.7	691.0	691.0
15°	673.4	676.1	680.2	682.9	684.2
17.5°	661.2	663.9	669.3	674.8	674.8
20°	649.0	651.7	658.5	663.9	665.3
22.5°	634.1	638.2	645.0	651.7	654.4
25°	619.2	623.3	630.0	638.2	640.9
27.5°	601.6	605.7	615.1	624.6	626.0
30°	584.0	588.0	600.2	608.4	612.4
32.5°	562.3	567.7	579.9	592.1	596.2
35°	542.0	547.4	560.9	573.1	578.6
37.5°	520.3	525.7	540.6	555.5	562.3
40°	495.9	502.7	520.3	536.6	546.0
42.5°	472.9	479.6	497.3	518.9	528.4
45°	447.1	453.9	475.6	500.0	512.2
47.5°	420.0	428.2	453.9	483.7	495.9
50°	392.9	402.4	430.9	464.7	478.3
52.5°	364.5	376.7	409.2	445.8	462.0
55°	334.7	349.6	387.5	426.8	443.1
57.5°	306.2	319.8	364.5	406.5	424.1
60°	275.1	292.7	342.8	386.2	405.1
62.5°	245.2	264.2	319.8	365.8	386.2
65°	219.5	238.5	295.4	344.2	365.8
67.5°	185.6	211.4	275.1	321.1	342.8
70°	151.8	187.0	249.3	296.7	317.1
72.5°	126.0	159.9	223.6	271.0	290.0
75°	96.2	134.1	196.5	237.1	249.3
77.5°	71.8	111.1	168.0	188.3	189.7
80°	52.8	85.4	127.4	134.1	139.6
82.5°	36.6	59.6	82.7	90.8	93.5
85°	23.0	35.2	47.4	51.5	51.5
87.5°	12.2	13.5	16.3	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)