

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: P294864

Luminaire Tested: **22CZ2-44-HRP-UNV-L935-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: P294864
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: 22CZ2-44-HRP-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (98) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

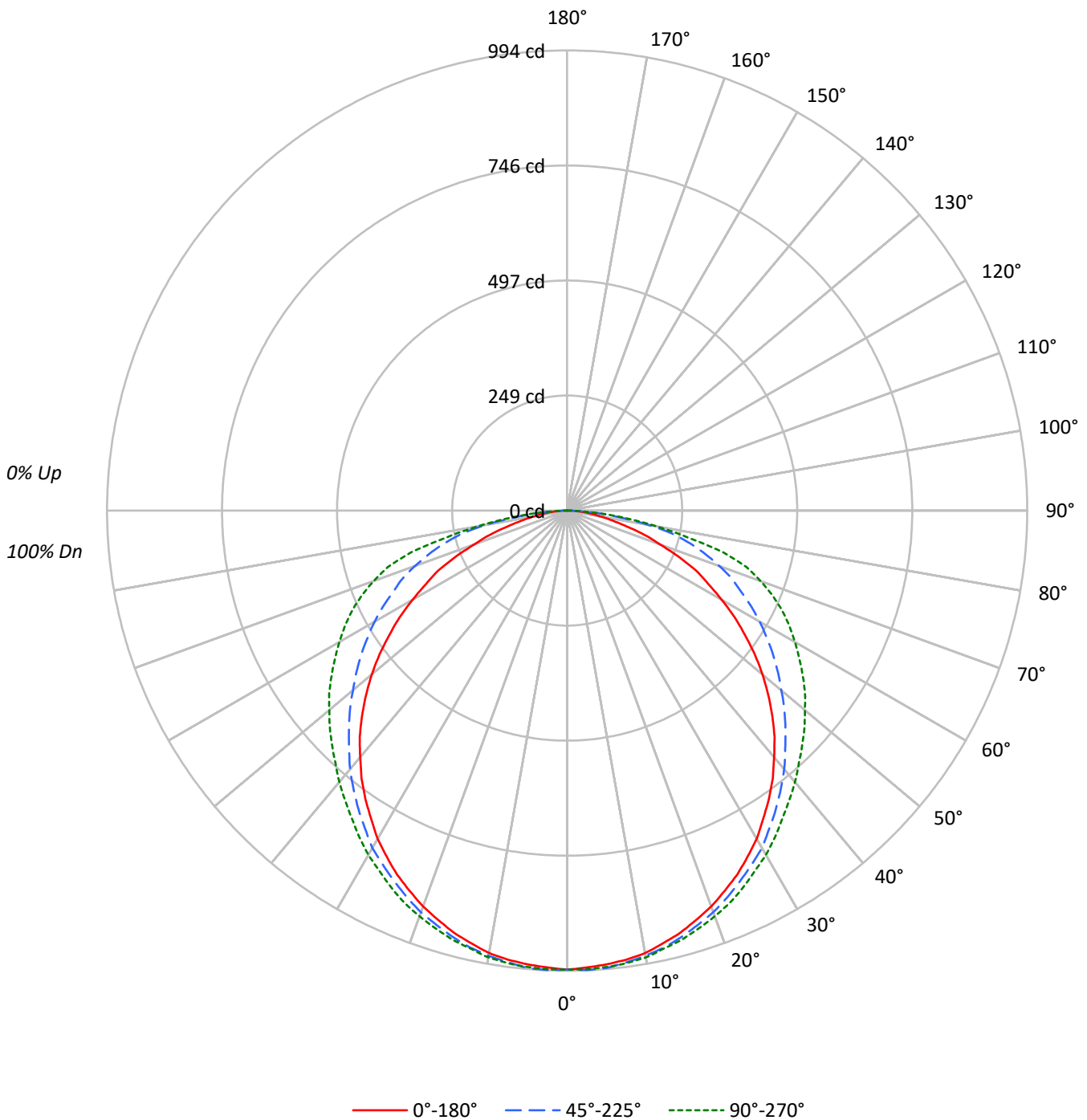
Lumens per Lamp: N/A
Luminaire Lumens: 3011.5 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
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



TEST NUMBER: P294864
CATALOG NUMBER: 22CZ2-44-HRP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P294864

CATALOG NUMBER: 22CZ2-44-HRP-UNV-L935-CD1-U

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	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73		80	75	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2668	2668	2668
5°	2658	2679	2673
10°	2652	2668	2678
15°	2630	2657	2673
20°	2606	2644	2671
25°	2578	2623	2668
30°	2544	2615	2668
35°	2496	2584	2665
40°	2442	2563	2689
45°	2386	2538	2733
50°	2306	2529	2807
55°	2201	2549	2914
60°	2075	2587	3057
65°	1960	2637	3266
70°	1674	2750	3497
75°	1403	2864	3634
80°	1148	2768	3033
85°	997	2053	2229



TEST NUMBER: P294864

CATALOG NUMBER: 22CZ2-44-HRP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	3.1
10°-20°	268.8	8.9
20°-30°	407.5	13.5
30°-40°	492.0	16.3
40°-50°	517.0	17.2
50°-60°	486.4	16.2
60°-70°	405.5	13.5
70°-80°	268.7	8.9
80°-90°	71.6	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°	770.3	25.6
0°-40°	1262.3	41.9
0°-60°	2265.6	75.2
0°-90°	3011.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3011.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	984	986	992	992	990	94
15°	944	948	954	958	959	266
25°	868	874	883	895	899	400
35°	760	768	786	804	811	475
45°	627	636	667	701	718	483
55°	469	490	543	598	621	420
65°	308	334	414	482	513	299
75°	135	188	276	332	350	146
85°	32	49	66	72	72	37
90°	0	0	0	0	0	



TEST NUMBER: P294864

CATALOG NUMBER: 22CZ2-44-HRP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.6	991.6	991.6	991.6	991.6
2.5°	987.8	989.7	993.5	993.5	991.6
5°	984.0	985.9	991.6	991.6	989.7
7.5°	978.3	980.2	984.0	987.8	985.9
10°	970.7	972.6	976.4	980.2	980.2
12.5°	957.5	959.4	966.9	968.8	968.8
15°	944.2	948.0	953.7	957.5	959.4
17.5°	927.1	930.9	938.5	946.1	946.1
20°	910.0	913.8	923.3	930.9	932.8
22.5°	889.1	894.8	904.3	913.8	917.6
25°	868.2	873.9	883.4	894.8	898.6
27.5°	843.5	849.2	862.5	875.8	877.7
30°	818.8	824.5	841.6	853.0	858.7
32.5°	788.4	796.0	813.1	830.2	835.9
35°	759.9	767.5	786.5	803.6	811.2
37.5°	729.5	737.1	758.0	778.9	788.4
40°	695.3	704.8	729.5	752.3	765.6
42.5°	663.0	672.5	697.2	727.6	740.9
45°	626.9	636.4	666.8	701.0	718.1
47.5°	588.9	600.3	636.4	678.2	695.3
50°	550.9	564.2	604.1	651.6	670.6
52.5°	511.0	528.1	573.7	625.0	647.8
55°	469.2	490.1	543.3	598.4	621.2
57.5°	429.3	448.3	511.0	569.9	594.6
60°	385.6	410.3	480.6	541.4	568.0
62.5°	343.8	370.4	448.3	512.9	541.4
65°	307.8	334.3	414.1	482.5	512.9
67.5°	260.3	296.4	385.6	450.2	480.6
70°	212.8	262.2	349.5	416.0	444.5
72.5°	176.7	224.2	313.5	379.9	406.5
75°	134.9	188.1	275.5	332.4	349.5
77.5°	100.7	155.8	235.6	264.1	266.0
80°	74.1	119.7	178.6	188.1	195.7
82.5°	51.3	83.6	115.9	127.3	131.1
85°	32.3	49.4	66.5	72.2	72.2
87.5°	17.1	19.0	22.8	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)