

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: P475163

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475163
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7696.9 lumens
Efficiency: N/A
Efficacy: 108.1 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

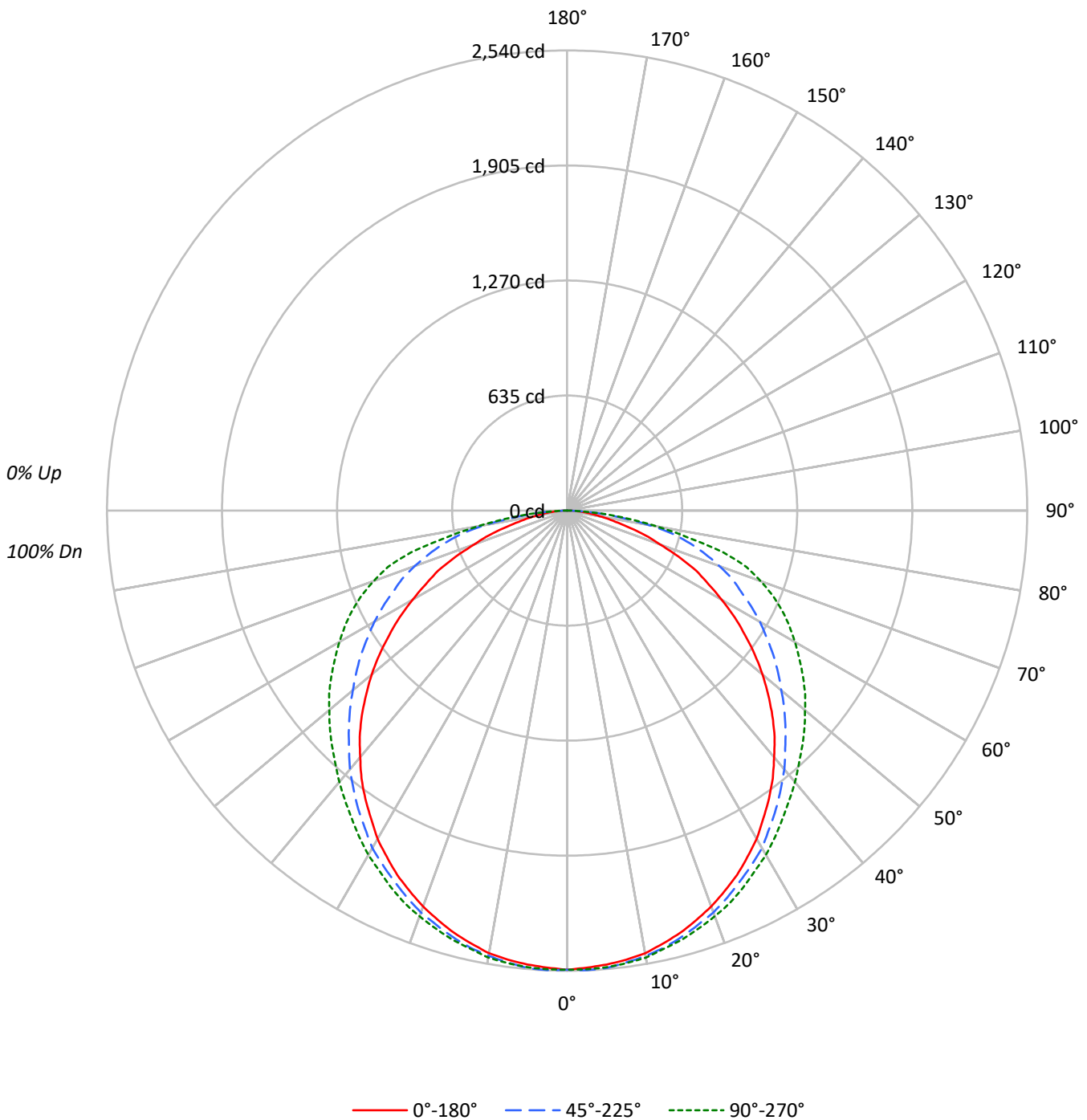
Input Watts (W): 71.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	6820	6820	6820
5°	6794	6846	6833
10°	6780	6820	6847
15°	6722	6790	6831
20°	6661	6758	6826
25°	6589	6703	6820
30°	6502	6683	6820
35°	6380	6604	6811
40°	6242	6549	6873
45°	6098	6487	6984
50°	5895	6464	7175
55°	5626	6516	7449
60°	5304	6611	7814
65°	5009	6740	8349
70°	4279	7029	8939
75°	3585	7323	9289
80°	2938	7071	7750
85°	2541	5243	5693



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.2	3.1
10°-20°	687.1	8.9
20°-30°	1041.4	13.5
30°-40°	1257.4	16.3
40°-50°	1321.3	17.2
50°-60°	1243.2	16.2
60°-70°	1036.5	13.5
70°-80°	686.8	8.9
80°-90°	183.0	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°	1968.7	25.6
0°-40°	3226.1	41.9
0°-60°	5790.5	75.2
0°-90°	7696.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7696.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2534	2534	2534	2534	2534	
5°	2515	2520	2534	2534	2530	239
15°	2413	2423	2437	2447	2452	680
25°	2219	2234	2258	2287	2297	1022
35°	1942	1962	2010	2054	2073	1214
45°	1602	1626	1704	1792	1835	1234
55°	1199	1253	1389	1529	1588	1073
65°	787	854	1058	1233	1311	765
75°	345	481	704	850	893	374
85°	82	126	170	184	184	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2534.3	2534.3	2534.3	2534.3	2534.3
2.5°	2524.9	2529.6	2539.5	2539.5	2534.3
5°	2515.0	2519.7	2534.3	2534.3	2529.6
7.5°	2500.5	2505.6	2515.0	2524.9	2519.7
10°	2481.2	2485.9	2495.8	2505.6	2505.6
12.5°	2447.3	2452.0	2471.3	2476.5	2476.5
15°	2413.0	2422.8	2437.4	2447.3	2452.0
17.5°	2369.7	2379.1	2398.4	2418.1	2418.1
20°	2325.9	2335.3	2359.8	2379.1	2383.8
22.5°	2272.3	2286.9	2311.3	2335.3	2345.2
25°	2219.1	2233.7	2257.7	2286.9	2296.8
27.5°	2155.6	2170.2	2204.5	2238.4	2243.1
30°	2092.6	2107.2	2150.9	2180.1	2194.7
32.5°	2015.0	2034.2	2078.0	2121.7	2136.3
35°	1942.0	1961.8	2010.2	2054.0	2073.3
37.5°	1864.4	1883.7	1937.3	1991.0	2015.0
40°	1776.9	1801.4	1864.4	1922.7	1956.6
42.5°	1694.6	1719.0	1782.1	1859.7	1893.6
45°	1602.4	1626.4	1704.5	1791.5	1835.2
47.5°	1505.0	1534.1	1626.4	1733.6	1776.9
50°	1408.1	1441.9	1544.0	1665.4	1713.9
52.5°	1306.0	1349.7	1466.4	1597.7	1655.5
55°	1199.2	1252.8	1388.8	1529.4	1587.8
57.5°	1097.1	1146.0	1306.0	1456.5	1519.6
60°	985.6	1048.6	1228.4	1383.6	1451.8
62.5°	878.8	947.0	1146.0	1311.2	1383.6
65°	786.6	854.3	1058.5	1233.1	1311.2
67.5°	665.2	757.4	985.6	1150.7	1228.4
70°	543.8	669.9	893.4	1063.2	1136.1
72.5°	451.6	573.0	801.2	971.0	1039.2
75°	344.8	480.8	704.3	849.6	893.4
77.5°	257.3	398.0	602.2	675.1	679.8
80°	189.6	305.8	456.3	480.8	500.1
82.5°	131.3	213.6	296.4	325.1	335.0
85°	82.3	126.1	169.8	184.4	184.4
87.5°	43.8	48.5	58.3	58.3	58.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)