

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: P475134

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475134
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-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7427.6 lumens
Efficiency: N/A
Efficacy: 104.3 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

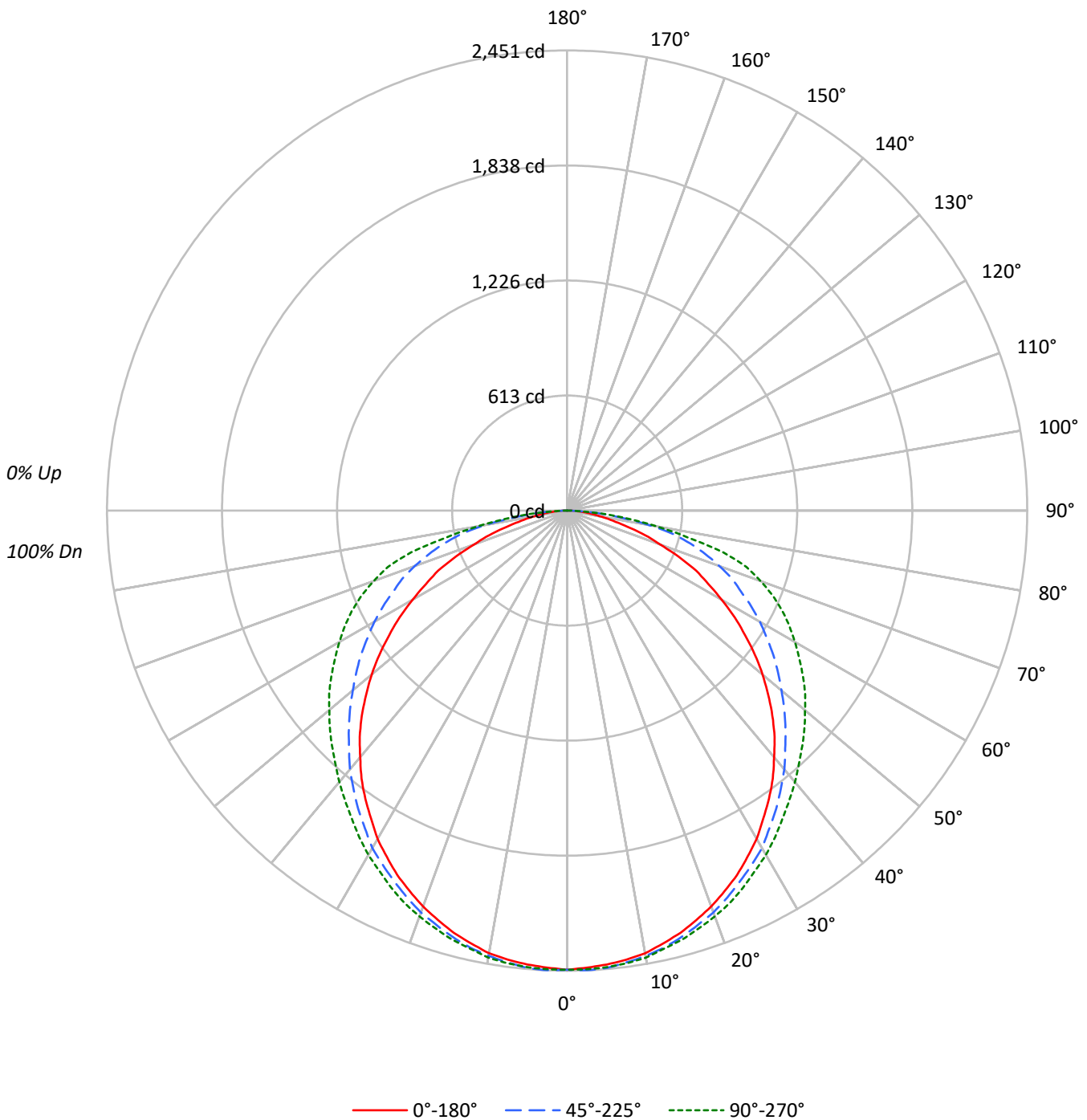
Input Watts (W): 71.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6581	6581	6581
5°	6556	6606	6594
10°	6542	6581	6607
15°	6487	6553	6592
20°	6428	6521	6588
25°	6358	6469	6581
30°	6275	6449	6581
35°	6157	6373	6572
40°	6023	6320	6633
45°	5885	6259	6740
50°	5689	6238	6924
55°	5429	6288	7188
60°	5119	6380	7540
65°	4833	6504	8057
70°	4129	6783	8626
75°	3460	7066	8963
80°	2836	6825	7479
85°	2452	5060	5496



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.8	3.1
10°-20°	663.1	8.9
20°-30°	1004.9	13.5
30°-40°	1213.4	16.3
40°-50°	1275.0	17.2
50°-60°	1199.6	16.2
60°-70°	1000.3	13.5
70°-80°	662.8	8.9
80°-90°	176.6	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°	1899.8	25.6
0°-40°	3113.2	41.9
0°-60°	5587.9	75.2
0°-90°	7427.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7427.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2446	2446	2446	2446	2446	
5°	2427	2432	2446	2446	2441	231
15°	2328	2338	2352	2362	2366	657
25°	2142	2156	2179	2207	2216	986
35°	1874	1893	1940	1982	2001	1172
45°	1546	1569	1645	1729	1771	1191
55°	1157	1209	1340	1476	1532	1035
65°	759	824	1022	1190	1265	739
75°	333	464	680	820	862	361
85°	79	122	164	178	178	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2445.6	2445.6	2445.6	2445.6	2445.6
2.5°	2436.6	2441.1	2450.6	2450.6	2445.6
5°	2427.0	2431.6	2445.6	2445.6	2441.1
7.5°	2412.9	2417.9	2427.0	2436.6	2431.6
10°	2394.3	2398.9	2408.4	2417.9	2417.9
12.5°	2361.6	2366.2	2384.8	2389.8	2389.8
15°	2328.5	2338.0	2352.1	2361.6	2366.2
17.5°	2286.7	2295.8	2314.4	2333.5	2333.5
20°	2244.5	2253.6	2277.2	2295.8	2300.4
22.5°	2192.8	2206.8	2230.4	2253.6	2263.1
25°	2141.5	2155.5	2178.7	2206.8	2216.4
27.5°	2080.2	2094.2	2127.4	2160.1	2164.6
30°	2019.3	2033.4	2075.6	2103.8	2117.9
32.5°	1944.4	1963.0	2005.3	2047.5	2061.6
35°	1874.1	1893.1	1939.9	1982.1	2000.7
37.5°	1799.2	1817.8	1869.5	1921.3	1944.4
40°	1714.7	1738.3	1799.2	1855.4	1888.1
42.5°	1635.3	1658.9	1719.7	1794.6	1827.3
45°	1546.3	1569.4	1644.8	1728.8	1771.0
47.5°	1452.3	1480.5	1569.4	1672.9	1714.7
50°	1358.8	1391.5	1490.0	1607.1	1653.9
52.5°	1260.3	1302.5	1415.1	1541.7	1597.6
55°	1157.2	1209.0	1340.2	1475.9	1532.2
57.5°	1058.7	1105.9	1260.3	1405.5	1466.4
60°	951.1	1011.9	1185.4	1335.2	1401.0
62.5°	848.0	913.9	1105.9	1265.3	1335.2
65°	759.1	824.4	1021.5	1189.9	1265.3
67.5°	641.9	730.9	951.1	1110.5	1185.4
70°	524.8	646.5	862.1	1026.0	1096.4
72.5°	435.8	553.0	773.1	937.0	1002.9
75°	332.8	464.0	679.6	819.9	862.1
77.5°	248.3	384.1	581.1	651.5	656.0
80°	183.0	295.1	440.4	464.0	482.6
82.5°	126.7	206.1	286.0	313.7	323.2
85°	79.4	121.7	163.9	178.0	178.0
87.5°	42.2	46.8	56.3	56.3	56.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)