

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: P475131

Luminaire Tested: **22CZ2-80VHE-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475131
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-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: 6266.8 lumens
Efficiency: N/A
Efficacy: 106.8 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

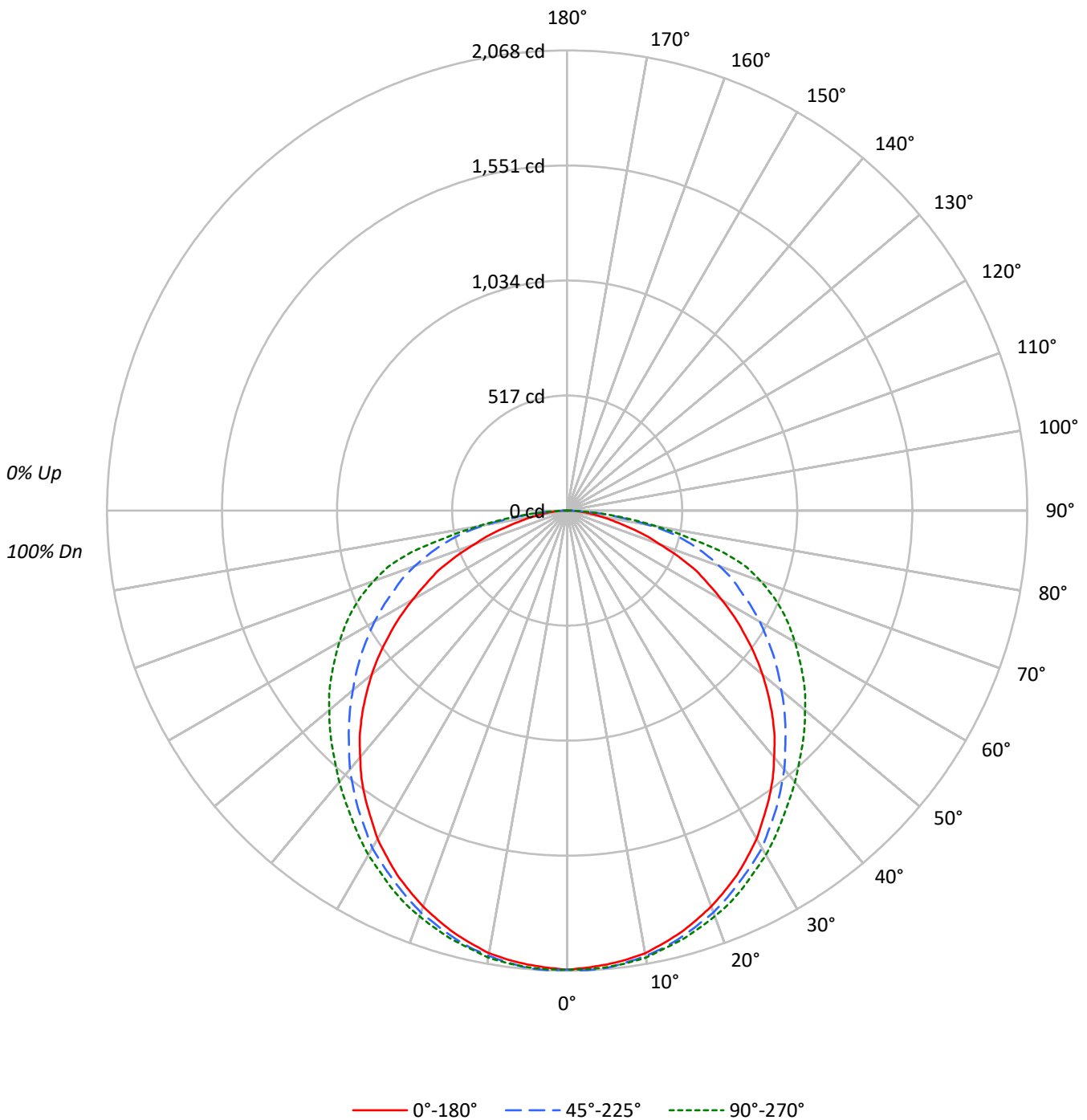
Input Watts (W): 58.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475131

CATALOG NUMBER: 22CZ2-80VHE-HRP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475131

CATALOG NUMBER: 22CZ2-80VHE-HRP-UNV-L830-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°	5553	5553	5553
5°	5531	5574	5564
10°	5520	5552	5575
15°	5473	5529	5562
20°	5423	5502	5558
25°	5365	5458	5552
30°	5294	5441	5552
35°	5194	5377	5545
40°	5082	5332	5596
45°	4965	5281	5686
50°	4799	5263	5842
55°	4581	5305	6065
60°	4319	5382	6362
65°	4078	5487	6797
70°	3484	5723	7278
75°	2920	5962	7563
80°	2393	5757	6310
85°	2069	4270	4638



TEST NUMBER: P475131

CATALOG NUMBER: 22CZ2-80VHE-HRP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.6	3.1
10°-20°	559.5	8.9
20°-30°	847.9	13.5
30°-40°	1023.8	16.3
40°-50°	1075.7	17.2
50°-60°	1012.2	16.2
60°-70°	843.9	13.5
70°-80°	559.2	8.9
80°-90°	149.0	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°	1602.9	25.6
0°-40°	2626.7	41.9
0°-60°	4714.6	75.2
0°-90°	6266.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6266.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2063	2063	2063	2063	2063	
5°	2048	2052	2063	2063	2060	195
15°	1965	1973	1984	1993	1996	554
25°	1807	1819	1838	1862	1870	832
35°	1581	1597	1637	1672	1688	989
45°	1305	1324	1388	1459	1494	1005
55°	976	1020	1131	1245	1293	873
65°	640	696	862	1004	1068	623
75°	281	392	573	692	727	305
85°	67	103	138	150	150	78
90°	0	0	0	0	0	



TEST NUMBER: P475131

CATALOG NUMBER: 22CZ2-80VHE-HRP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2063.4	2063.4	2063.4	2063.4	2063.4
2.5°	2055.8	2059.6	2067.6	2067.6	2063.4
5°	2047.7	2051.5	2063.4	2063.4	2059.6
7.5°	2035.8	2040.1	2047.7	2055.8	2051.5
10°	2020.1	2024.0	2032.0	2040.1	2040.1
12.5°	1992.6	1996.4	2012.1	2016.3	2016.3
15°	1964.6	1972.6	1984.5	1992.6	1996.4
17.5°	1929.4	1937.0	1952.7	1968.8	1968.8
20°	1893.7	1901.4	1921.3	1937.0	1940.8
22.5°	1850.1	1861.9	1881.9	1901.4	1909.4
25°	1806.8	1818.7	1838.2	1861.9	1870.0
27.5°	1755.1	1767.0	1794.9	1822.5	1826.3
30°	1703.7	1715.6	1751.2	1775.0	1786.9
32.5°	1640.5	1656.3	1691.9	1727.5	1739.4
35°	1581.2	1597.3	1636.7	1672.3	1688.0
37.5°	1518.0	1533.7	1577.3	1621.0	1640.5
40°	1446.7	1466.6	1518.0	1565.5	1593.1
42.5°	1379.7	1399.6	1450.9	1514.1	1541.7
45°	1304.6	1324.2	1387.7	1458.6	1494.2
47.5°	1225.3	1249.1	1324.2	1411.5	1446.7
50°	1146.4	1174.0	1257.1	1356.0	1395.4
52.5°	1063.3	1098.9	1193.9	1300.8	1347.9
55°	976.4	1020.0	1130.7	1245.3	1292.8
57.5°	893.2	933.1	1063.3	1185.9	1237.2
60°	802.5	853.8	1000.1	1126.5	1182.1
62.5°	715.5	771.1	933.1	1067.5	1126.5
65°	640.4	695.6	861.8	1003.9	1067.5
67.5°	541.6	616.7	802.5	936.9	1000.1
70°	442.8	545.4	727.4	865.7	925.0
72.5°	367.7	466.5	652.3	790.6	846.1
75°	280.8	391.5	573.4	691.8	727.4
77.5°	209.5	324.0	490.3	549.7	553.5
80°	154.4	249.0	371.5	391.5	407.2
82.5°	106.9	173.9	241.3	264.7	272.7
85°	67.0	102.7	138.3	150.2	150.2
87.5°	35.6	39.5	47.5	47.5	47.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)