

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: P474809

Luminaire Tested: **22CZ2-65VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474809
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

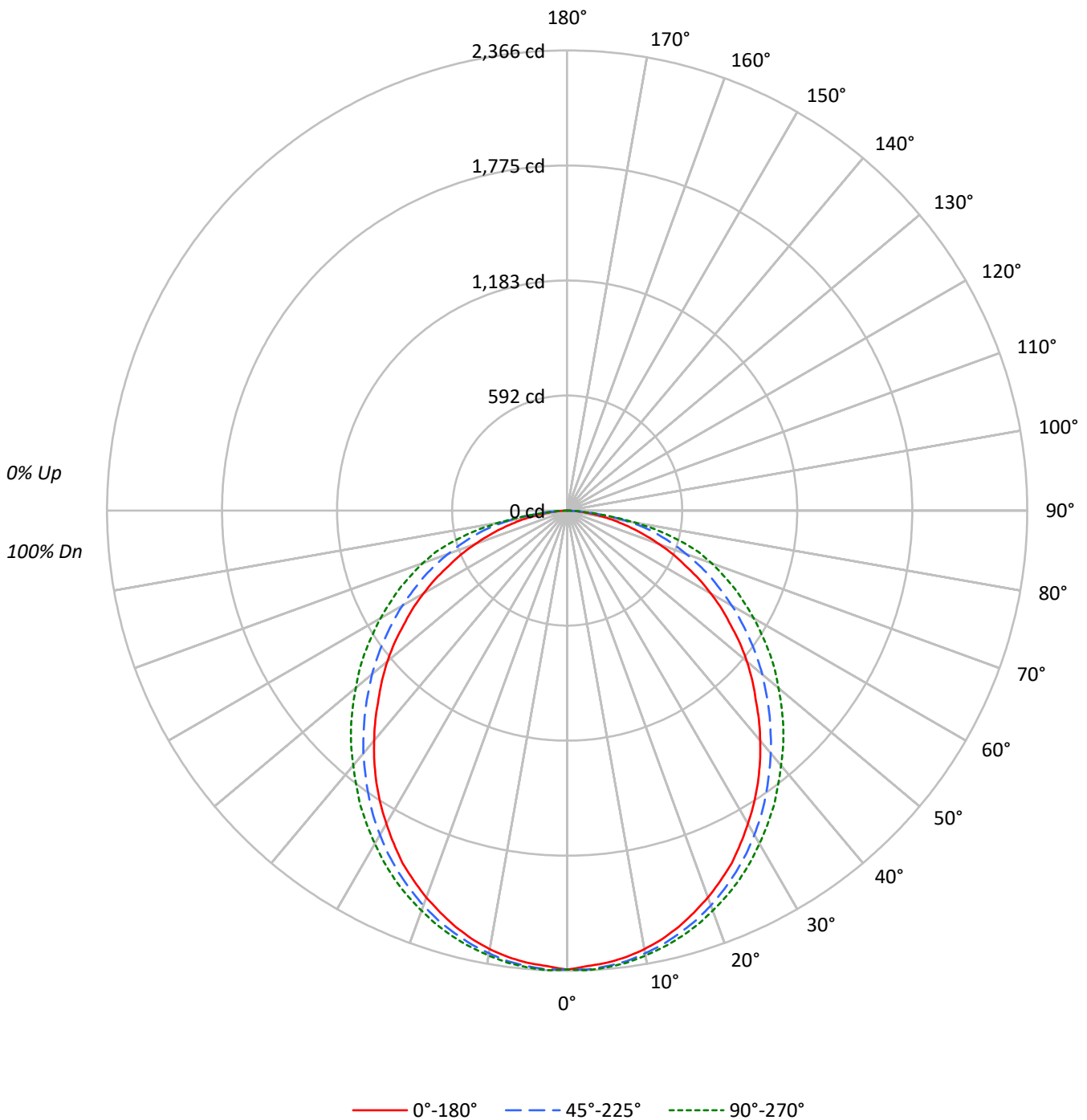
Lumens per Lamp: N/A
Luminaire Lumens: 6507.8 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 45.7
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: P474809
CATALOG NUMBER: 22CZ2-65VHE-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474809

CATALOG NUMBER: 22CZ2-65VHE-UNV-L835-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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6351	6351	6351
5°	6304	6353	6368
10°	6257	6317	6347
15°	6172	6261	6318
20°	6061	6187	6270
25°	5942	6093	6219
30°	5778	5983	6145
35°	5616	5855	6086
40°	5426	5725	6010
45°	5218	5595	5982
50°	5050	5481	5936
55°	4814	5362	5949
60°	4597	5270	5966
65°	4274	5202	6060
70°	3950	5129	6211
75°	3532	5105	6249
80°	2963	4838	5456
85°	2294	3313	3100



TEST NUMBER: P474809

CATALOG NUMBER: 22CZ2-65VHE-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	3.4
10°-20°	633.0	9.7
20°-30°	943.8	14.5
30°-40°	1114.1	17.1
40°-50°	1135.5	17.4
50°-60°	1024.0	15.7
60°-70°	804.9	12.4
70°-80°	503.9	7.7
80°-90°	125.7	1.9
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°	1799.7	27.7
0°-40°	2913.8	44.8
0°-60°	5073.3	78.0
0°-90°	6507.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6507.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2360	2360	2360	2360	2360	
5°	2334	2339	2352	2357	2357	221
15°	2216	2225	2247	2264	2268	624
25°	2001	2016	2052	2084	2095	920
35°	1710	1732	1782	1832	1853	1068
45°	1371	1401	1470	1542	1572	1061
55°	1026	1058	1143	1231	1268	921
65°	671	712	817	908	952	669
75°	340	391	491	579	601	361
85°	74	95	107	107	100	90
90°	0	0	0	0	0	



TEST NUMBER: P474809

CATALOG NUMBER: 22CZ2-65VHE-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2360.0	2360.0	2360.0	2360.0	2360.0
2.5°	2344.9	2350.4	2361.4	2365.5	2365.5
5°	2333.9	2339.4	2351.8	2357.3	2357.3
7.5°	2316.0	2321.5	2336.7	2343.5	2344.9
10°	2289.9	2296.8	2311.9	2322.9	2322.9
12.5°	2256.9	2263.8	2283.0	2296.8	2298.2
15°	2215.6	2225.3	2247.3	2263.8	2267.9
17.5°	2167.5	2182.6	2207.4	2228.0	2232.1
20°	2116.6	2131.7	2160.6	2184.0	2189.5
22.5°	2060.2	2074.0	2108.4	2137.2	2144.1
25°	2001.1	2016.2	2052.0	2083.6	2094.6
27.5°	1930.9	1948.8	1991.5	2027.2	2038.2
30°	1859.4	1881.4	1925.4	1965.3	1977.7
32.5°	1786.5	1807.2	1856.7	1899.3	1915.8
35°	1709.5	1731.5	1782.4	1831.9	1852.6
37.5°	1628.4	1650.4	1705.4	1761.8	1781.0
40°	1544.5	1570.6	1629.8	1690.3	1710.9
42.5°	1459.2	1486.7	1548.6	1616.0	1643.5
45°	1371.2	1401.4	1470.2	1541.7	1572.0
47.5°	1291.4	1316.2	1387.7	1466.1	1495.0
50°	1206.2	1229.5	1309.3	1387.7	1418.0
52.5°	1119.5	1141.5	1226.8	1309.3	1346.4
55°	1026.0	1057.6	1142.9	1230.9	1268.0
57.5°	943.5	972.3	1060.4	1149.8	1185.5
60°	854.1	884.3	979.2	1070.0	1108.5
62.5°	764.7	797.7	894.0	991.6	1027.4
65°	671.2	712.4	816.9	907.7	951.7
67.5°	591.4	631.3	734.4	829.3	867.8
70°	502.0	548.8	651.9	748.2	789.4
72.5°	418.1	464.9	570.8	667.0	708.3
75°	339.7	390.6	491.0	579.0	601.0
77.5°	264.1	312.2	412.6	463.5	486.9
80°	191.2	237.9	312.2	346.6	352.1
82.5°	129.3	169.2	211.8	221.4	215.9
85°	74.3	94.9	107.3	107.3	100.4
87.5°	30.3	30.3	26.1	16.5	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)