

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: P475331

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475331  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-65VHE-SQR-UNV-L850-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6300.3 lumens  
Efficiency: N/A  
Efficacy: 137.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

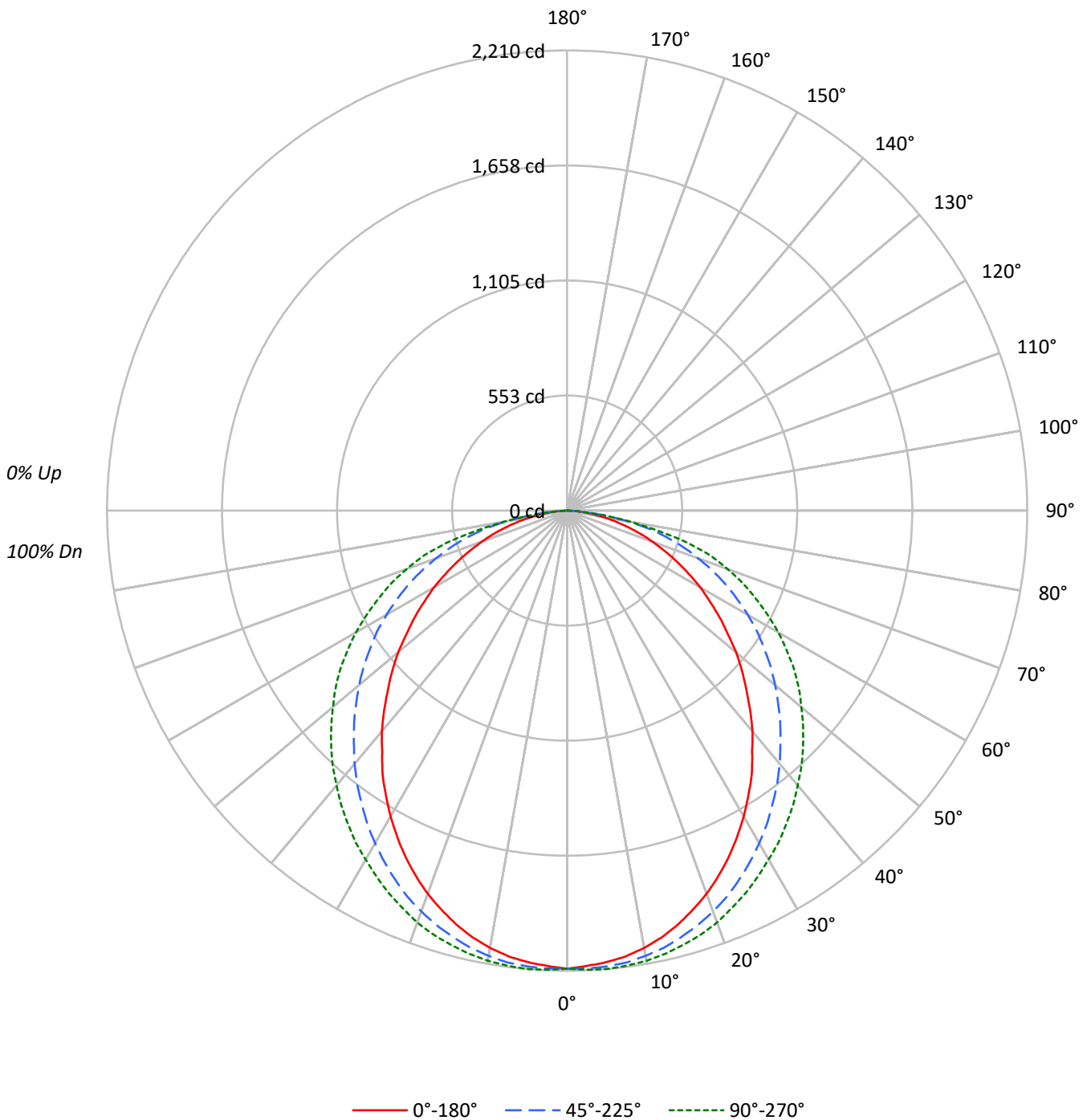
Input Watts (W): 45.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	76	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5922	5922	5922
5°	5880	5937	5970
10°	5826	5932	5997
15°	5732	5906	6015
20°	5609	5866	6028
25°	5452	5806	6019
30°	5268	5733	6012
35°	5078	5648	6032
40°	4863	5578	6051
45°	4631	5508	6100
50°	4431	5458	6146
55°	4195	5415	6244
60°	3975	5392	6309
65°	3712	5349	6358
70°	3411	5269	6446
75°	3079	5130	6216
80°	2641	4544	4682
85°	2124	2677	2124



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.6	3.3
10°-20°	596.5	9.5
20°-30°	896.0	14.2
30°-40°	1068.6	17.0
40°-50°	1104.8	17.5
50°-60°	1015.7	16.1
60°-70°	808.6	12.8
70°-80°	494.0	7.8
80°-90°	107.4	1.7
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°	1701.2	27.0
0°-40°	2769.7	44.0
0°-60°	4890.3	77.6
0°-90°	6300.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6300.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2201	2201	2201	2201	2201	
5°	2177	2183	2198	2207	2210	206
15°	2057	2081	2120	2150	2159	579
25°	1836	1881	1956	2010	2027	845
35°	1546	1612	1719	1809	1836	964
45°	1217	1304	1447	1564	1603	941
55°	894	993	1154	1286	1331	800
65°	583	682	840	957	999	578
75°	296	383	493	580	598	315
85°	69	84	87	75	69	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2200.7	2200.7	2200.7	2200.7	2200.7
2.5°	2188.8	2191.8	2200.7	2207.0	2207.0
5°	2176.9	2182.9	2197.7	2207.0	2210.0
7.5°	2159.0	2168.0	2188.8	2200.7	2204.0
10°	2132.2	2144.1	2170.9	2188.8	2194.8
12.5°	2099.1	2117.0	2150.1	2173.9	2179.9
15°	2057.4	2081.3	2120.0	2150.1	2159.0
17.5°	2009.5	2039.3	2087.2	2123.3	2135.2
20°	1958.5	1988.6	2048.5	2090.2	2105.1
22.5°	1899.0	1937.7	2006.5	2054.5	2066.4
25°	1836.1	1880.8	1955.5	2009.5	2027.3
27.5°	1767.3	1821.2	1901.9	1967.8	1982.7
30°	1695.5	1752.4	1845.0	1916.8	1934.7
32.5°	1620.7	1686.5	1785.1	1865.9	1890.0
35°	1545.9	1611.7	1719.3	1809.3	1836.1
37.5°	1459.2	1537.0	1656.7	1749.4	1782.2
40°	1384.4	1459.2	1587.9	1689.5	1722.6
42.5°	1300.7	1381.4	1516.1	1626.6	1665.7
45°	1217.0	1303.7	1447.3	1564.1	1602.8
47.5°	1139.2	1225.9	1375.5	1498.3	1537.0
50°	1058.5	1148.2	1303.7	1429.4	1468.1
52.5°	971.8	1070.4	1231.9	1357.6	1402.6
55°	894.1	992.7	1154.1	1285.8	1330.8
57.5°	813.3	914.9	1082.7	1208.1	1250.1
60°	738.5	837.1	1001.9	1124.4	1172.3
62.5°	657.8	759.4	920.9	1040.6	1085.6
65°	583.0	682.0	840.1	956.9	998.6
67.5°	508.2	607.2	756.4	867.3	914.9
70°	433.5	532.4	669.7	777.6	819.3
72.5°	367.9	454.6	586.0	684.9	723.6
75°	296.1	382.8	493.4	580.0	597.9
77.5°	230.3	308.1	400.7	439.4	445.7
80°	170.4	230.3	293.2	302.1	302.1
82.5°	113.5	158.5	182.3	185.3	182.3
85°	68.8	83.7	86.7	74.8	68.8
87.5°	23.8	23.8	14.9	8.9	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)