

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: P475068

Luminaire Tested: **22CZ2-55VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475068  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-RDP-UNV-L840-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3799.5 lumens  
Efficiency: N/A  
Efficacy: 98.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

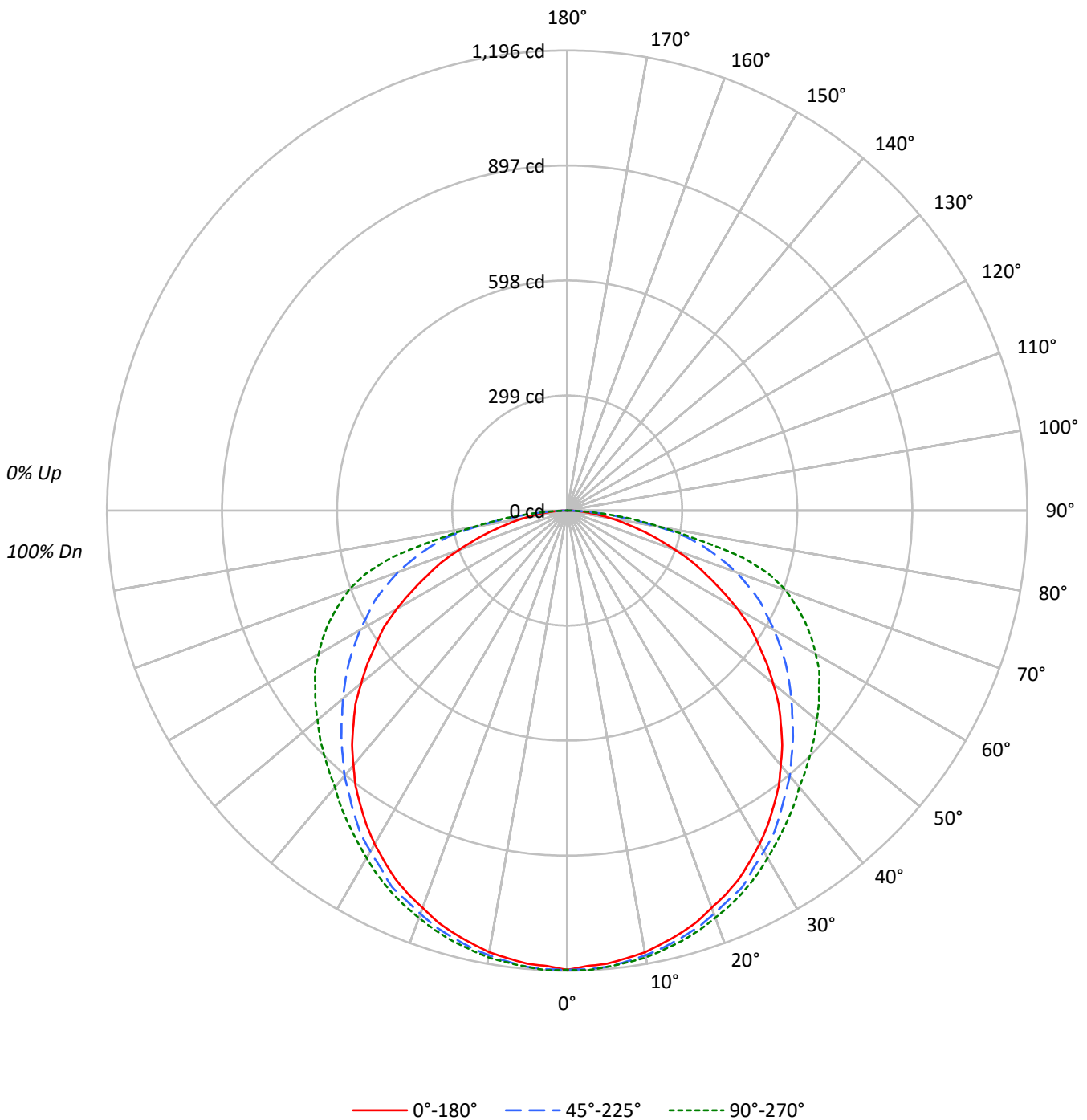
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	3211	3211	3211
5°	3194	3216	3216
10°	3184	3208	3223
15°	3169	3200	3223
20°	3145	3193	3226
25°	3137	3204	3237
30°	3109	3178	3240
35°	3075	3168	3260
40°	3034	3161	3299
45°	2989	3159	3403
50°	2925	3183	3545
55°	2846	3252	3750
60°	2753	3340	4017
65°	2562	3507	4343
70°	2353	3674	4751
75°	2065	3864	4912
80°	1777	3680	3856
85°	1553	2677	2933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.9	3.0
10°-20°	324.1	8.5
20°-30°	494.5	13.0
30°-40°	603.8	15.9
40°-50°	645.6	17.0
50°-60°	623.2	16.4
60°-70°	536.5	14.1
70°-80°	363.0	9.6
80°-90°	95.8	2.5
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°	931.6	24.5
0°-40°	1535.4	40.4
0°-60°	2804.3	73.8
0°-90°	3799.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3799.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1193	1193	1193	1193	1193	
5°	1182	1185	1191	1191	1191	112
15°	1138	1140	1149	1154	1157	321
25°	1056	1062	1079	1084	1090	486
35°	936	945	964	984	992	586
45°	785	799	830	872	894	606
55°	607	626	693	763	799	544
65°	402	442	551	637	682	400
75°	199	263	372	447	472	213
85°	50	70	87	89	95	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1193.4	1193.4	1193.4	1193.4	1193.4
2.5°	1185.1	1187.9	1193.4	1193.4	1196.2
5°	1182.3	1185.1	1190.6	1190.6	1190.6
7.5°	1174.0	1176.8	1182.3	1185.1	1185.1
10°	1165.4	1168.4	1174.0	1176.8	1179.5
12.5°	1151.5	1154.3	1162.6	1168.4	1168.4
15°	1137.6	1140.4	1148.7	1154.3	1157.0
17.5°	1120.7	1126.5	1134.8	1140.4	1143.2
20°	1098.4	1104.0	1115.1	1123.7	1126.5
22.5°	1079.0	1084.5	1095.7	1104.0	1109.5
25°	1056.5	1062.1	1079.0	1084.5	1090.1
27.5°	1028.4	1034.3	1048.2	1059.3	1067.6
30°	1000.7	1006.2	1022.9	1037.1	1042.6
32.5°	969.8	978.2	997.9	1009.0	1017.3
35°	936.2	944.6	964.3	983.7	992.3
37.5°	902.9	911.2	930.7	956.0	967.1
40°	863.8	874.9	899.9	933.5	939.0
42.5°	827.4	841.3	863.8	902.9	916.8
45°	785.4	799.3	830.1	872.1	894.3
47.5°	746.3	760.2	793.8	844.0	872.1
50°	698.8	718.2	760.2	819.0	846.8
52.5°	654.1	670.7	726.8	791.0	824.6
55°	606.6	626.0	693.2	762.9	799.3
57.5°	564.6	581.3	656.8	735.2	777.1
60°	511.6	533.8	620.5	704.3	746.3
62.5°	455.5	489.1	584.1	670.7	715.4
65°	402.4	441.6	550.7	637.1	682.1
67.5°	354.9	396.9	508.8	601.0	643.0
70°	299.1	352.2	466.9	556.3	603.8
72.5°	248.8	307.5	419.4	508.8	550.7
75°	198.6	262.7	371.6	447.2	472.4
77.5°	153.6	215.2	318.6	341.1	343.8
80°	114.7	170.5	237.5	240.2	248.8
82.5°	78.3	120.3	153.6	167.8	170.5
85°	50.3	70.0	86.7	89.4	95.0
87.5°	22.5	25.3	30.8	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)