

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: P475012

Luminaire Tested: **22CZ2-65VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475012  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-65VHE-RDP-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4207.9 lumens  
Efficiency: N/A  
Efficacy: 92.1 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

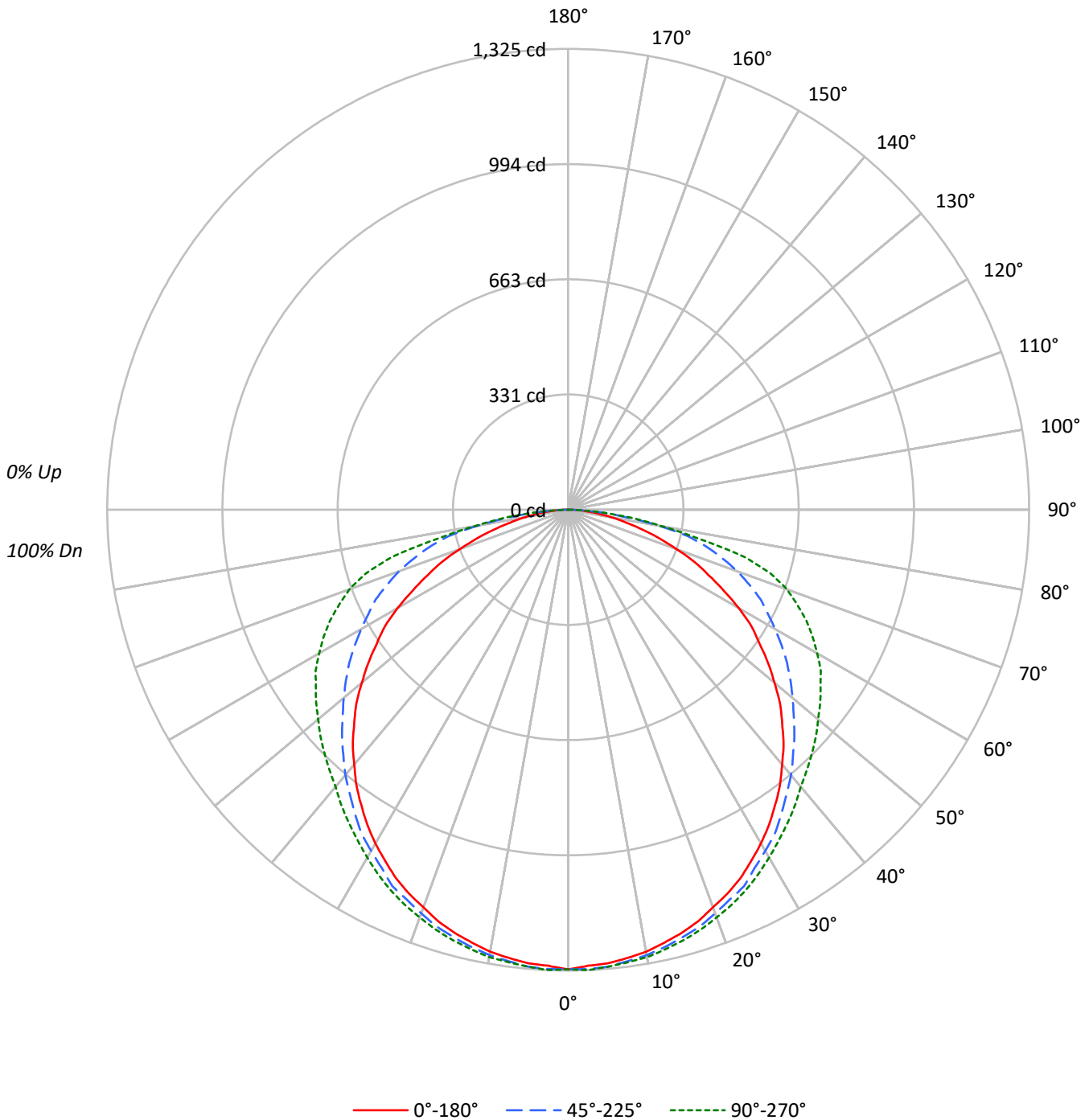
Input Watts (W): 45.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3557	3557	3557
5°	3537	3562	3562
10°	3527	3553	3569
15°	3510	3544	3570
20°	3484	3536	3573
25°	3474	3548	3585
30°	3443	3520	3588
35°	3406	3508	3610
40°	3360	3501	3653
45°	3310	3499	3769
50°	3240	3525	3926
55°	3152	3602	4153
60°	3049	3698	4448
65°	2838	3883	4810
70°	2607	4068	5261
75°	2286	4278	5440
80°	1968	4076	4271
85°	1720	2964	3248



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	3.0
10°-20°	359.0	8.5
20°-30°	547.7	13.0
30°-40°	668.7	15.9
40°-50°	715.0	17.0
50°-60°	690.2	16.4
60°-70°	594.1	14.1
70°-80°	402.0	9.6
80°-90°	106.1	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°	1031.7	24.5
0°-40°	1700.4	40.4
0°-60°	3105.6	73.8
0°-90°	4207.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4207.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1309	1312	1319	1319	1319	124
15°	1260	1263	1272	1278	1281	355
25°	1170	1176	1195	1201	1207	538
35°	1037	1046	1068	1090	1099	649
45°	870	885	919	966	990	671
55°	672	693	768	845	885	602
65°	446	489	610	706	755	443
75°	220	291	412	495	523	236
85°	56	78	96	99	105	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1321.7	1321.7	1321.7	1321.7	1321.7
2.5°	1312.5	1315.5	1321.7	1321.7	1324.8
5°	1309.4	1312.5	1318.6	1318.6	1318.6
7.5°	1300.2	1303.2	1309.4	1312.5	1312.5
10°	1290.6	1294.0	1300.2	1303.2	1306.3
12.5°	1275.2	1278.3	1287.5	1294.0	1294.0
15°	1259.9	1262.9	1272.2	1278.3	1281.4
17.5°	1241.1	1247.6	1256.8	1262.9	1266.0
20°	1216.5	1222.6	1234.9	1244.5	1247.6
22.5°	1195.0	1201.1	1213.4	1222.6	1228.8
25°	1170.0	1176.2	1195.0	1201.1	1207.3
27.5°	1139.0	1145.4	1160.8	1173.1	1182.4
30°	1108.2	1114.4	1132.8	1148.5	1154.7
32.5°	1074.1	1083.3	1105.1	1117.5	1126.7
35°	1036.9	1046.1	1067.9	1089.5	1099.0
37.5°	1000.0	1009.2	1030.7	1058.7	1071.0
40°	956.6	968.9	996.6	1033.8	1039.9
42.5°	916.3	931.7	956.6	1000.0	1015.3
45°	869.8	885.2	919.4	965.8	990.4
47.5°	826.5	841.9	879.1	934.7	965.8
50°	773.9	795.4	841.9	907.1	937.8
52.5°	724.4	742.8	804.9	876.0	913.2
55°	671.8	693.3	767.7	844.9	885.2
57.5°	625.3	643.8	727.4	814.2	860.6
60°	566.6	591.2	687.1	780.0	826.5
62.5°	504.4	541.7	646.8	742.8	792.3
65°	445.7	489.1	609.9	705.6	755.4
67.5°	393.1	439.5	563.5	665.6	712.1
70°	331.3	390.0	517.0	616.1	668.7
72.5°	275.6	340.5	464.5	563.5	609.9
75°	219.9	291.0	411.5	495.2	523.2
77.5°	170.1	238.4	352.8	377.7	380.8
80°	127.0	188.9	263.0	266.1	275.6
82.5°	86.7	133.2	170.1	185.8	188.9
85°	55.7	77.5	96.0	99.0	105.2
87.5°	24.9	28.0	34.1	31.1	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)