

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: P475070

Luminaire Tested: **22CZ2-65VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475070
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-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: 4443.3 lumens
Efficiency: N/A
Efficacy: 97.2 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

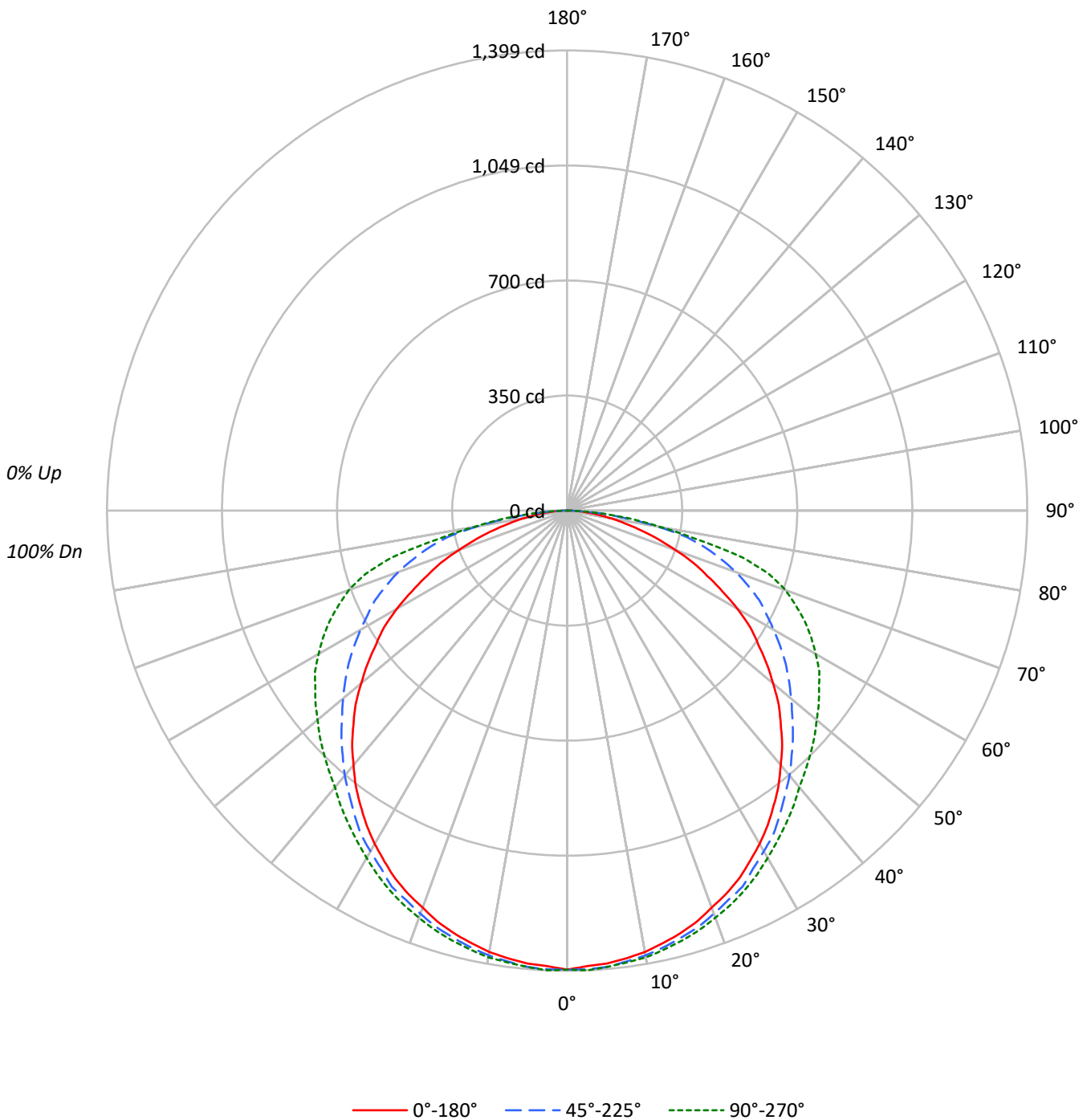
Input Watts (W): 45.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475070

CATALOG NUMBER: 22CZ2-65VHE-RDP-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475070

CATALOG NUMBER: 22CZ2-65VHE-RDP-UNV-L840-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	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°	3756	3756	3756
5°	3735	3761	3761
10°	3724	3751	3769
15°	3706	3743	3770
20°	3679	3735	3773
25°	3668	3746	3785
30°	3636	3717	3789
35°	3597	3705	3812
40°	3548	3697	3857
45°	3495	3694	3980
50°	3421	3722	4146
55°	3328	3803	4386
60°	3220	3905	4697
65°	2996	4101	5079
70°	2752	4296	5556
75°	2414	4519	5744
80°	2078	4303	4510
85°	1815	3128	3430



TEST NUMBER: P475070

CATALOG NUMBER: 22CZ2-65VHE-RDP-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	3.0
10°-20°	379.1	8.5
20°-30°	578.3	13.0
30°-40°	706.1	15.9
40°-50°	755.0	17.0
50°-60°	728.8	16.4
60°-70°	627.4	14.1
70°-80°	424.5	9.6
80°-90°	112.0	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°	1089.4	24.5
0°-40°	1795.6	40.4
0°-60°	3279.4	73.8
0°-90°	4443.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4443.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1383	1386	1392	1392	1392	131
15°	1330	1334	1343	1350	1353	375
25°	1236	1242	1262	1268	1275	569
35°	1095	1105	1128	1150	1160	685
45°	918	935	971	1020	1046	709
55°	709	732	811	892	935	636
65°	471	516	644	745	798	468
75°	232	307	435	523	552	249
85°	59	82	101	105	111	66
90°	0	0	0	0	0	



TEST NUMBER: P475070

CATALOG NUMBER: 22CZ2-65VHE-RDP-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1395.6	1395.6	1395.6	1395.6	1395.6
2.5°	1385.9	1389.2	1395.6	1395.6	1398.9
5°	1382.7	1385.9	1392.4	1392.4	1392.4
7.5°	1372.9	1376.2	1382.7	1385.9	1385.9
10°	1362.8	1366.4	1372.9	1376.2	1379.4
12.5°	1346.6	1349.9	1359.6	1366.4	1366.4
15°	1330.4	1333.6	1343.4	1349.9	1353.1
17.5°	1310.6	1317.4	1327.1	1333.6	1336.9
20°	1284.6	1291.1	1304.1	1314.1	1317.4
22.5°	1261.8	1268.3	1281.3	1291.1	1297.6
25°	1235.5	1242.0	1261.8	1268.3	1274.8
27.5°	1202.7	1209.5	1225.8	1238.8	1248.5
30°	1170.2	1176.7	1196.2	1212.8	1219.3
32.5°	1134.2	1143.9	1167.0	1180.0	1189.7
35°	1094.9	1104.6	1127.7	1150.4	1160.5
37.5°	1055.9	1065.7	1088.4	1117.9	1130.9
40°	1010.1	1023.1	1052.3	1091.6	1098.1
42.5°	967.6	983.8	1010.1	1055.9	1072.2
45°	918.5	934.8	970.8	1019.9	1045.8
47.5°	872.7	889.0	928.3	987.1	1019.9
50°	817.2	839.9	889.0	957.8	990.3
52.5°	764.9	784.4	850.0	925.0	964.3
55°	709.4	732.1	810.7	892.2	934.8
57.5°	660.3	679.8	768.1	859.7	908.8
60°	598.3	624.3	725.6	823.7	872.7
62.5°	532.7	572.0	683.0	784.4	836.7
65°	470.6	516.4	644.1	745.1	797.7
67.5°	415.1	464.1	595.0	702.9	751.9
70°	349.8	411.8	546.0	650.6	706.1
72.5°	291.0	359.5	490.4	595.0	644.1
75°	232.2	307.3	434.6	522.9	552.5
77.5°	179.6	251.7	372.5	398.8	402.1
80°	134.1	199.4	277.7	280.9	291.0
82.5°	91.6	140.6	179.6	196.2	199.4
85°	58.8	81.8	101.3	104.6	111.1
87.5°	26.3	29.6	36.1	32.8	32.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)