

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: P475157

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475157
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5271.7 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

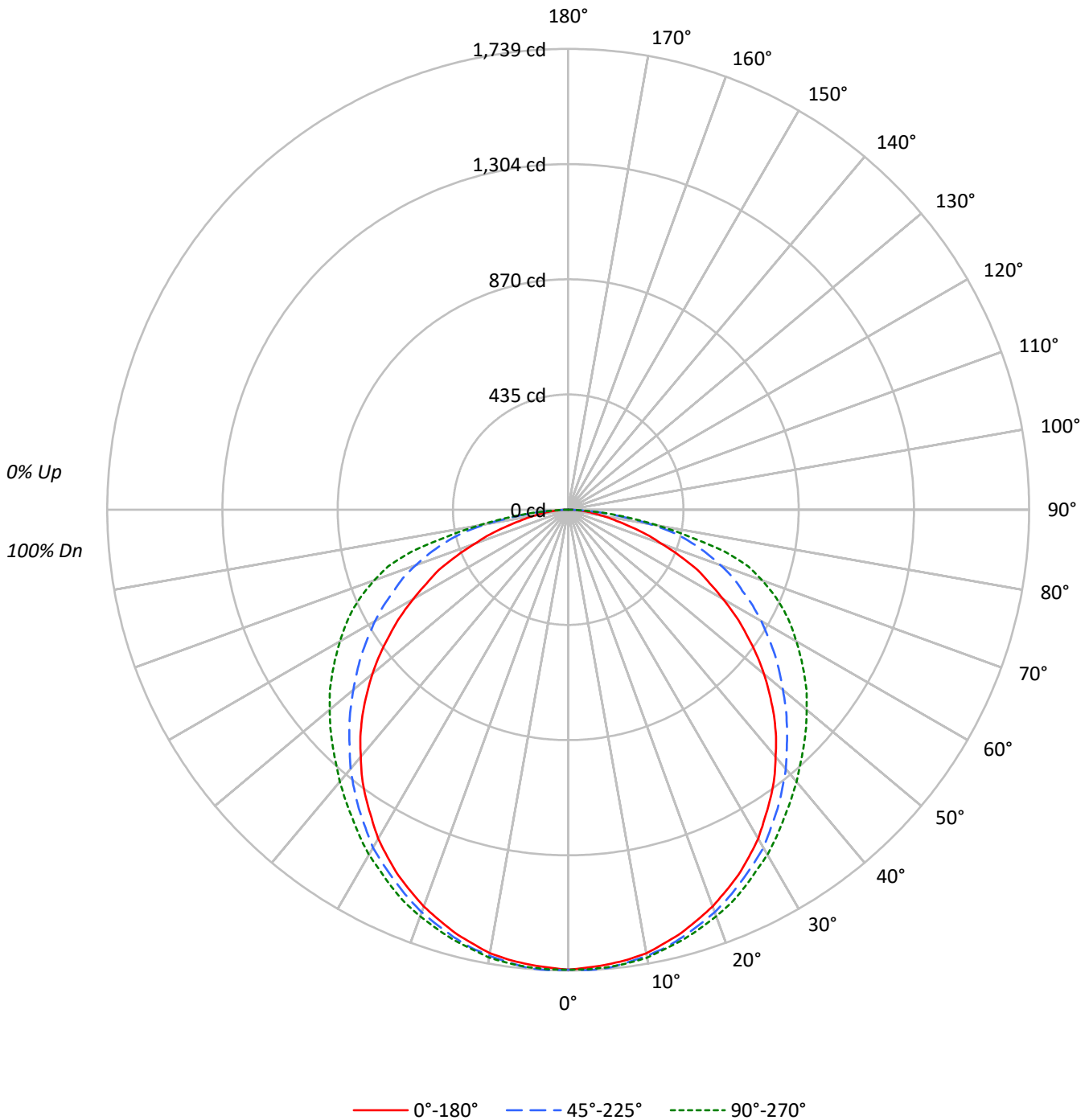
Input Watts (W): 45.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4671	4671	4671
5°	4653	4689	4680
10°	4644	4671	4689
15°	4604	4651	4679
20°	4562	4628	4676
25°	4513	4591	4671
30°	4453	4578	4671
35°	4369	4523	4665
40°	4275	4486	4708
45°	4177	4443	4784
50°	4037	4427	4914
55°	3853	4463	5102
60°	3633	4528	5352
65°	3430	4616	5718
70°	2931	4814	6123
75°	2456	5016	6362
80°	2013	4844	5308
85°	1741	3591	3900



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	3.1
10°-20°	470.6	8.9
20°-30°	713.2	13.5
30°-40°	861.2	16.3
40°-50°	904.9	17.2
50°-60°	851.5	16.2
60°-70°	709.9	13.5
70°-80°	470.4	8.9
80°-90°	125.4	2.4
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°	1348.4	25.6
0°-40°	2209.6	41.9
0°-60°	3966.0	75.2
0°-90°	5271.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5271.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1736	1736	1736	1736	1736	
5°	1723	1726	1736	1736	1733	164
15°	1653	1659	1669	1676	1679	466
25°	1520	1530	1546	1566	1573	700
35°	1330	1344	1377	1407	1420	832
45°	1098	1114	1167	1227	1257	845
55°	821	858	951	1048	1088	735
65°	539	585	725	844	898	524
75°	236	329	482	582	612	256
85°	56	86	116	126	126	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1735.8	1735.8	1735.8	1735.8	1735.8
2.5°	1729.3	1732.6	1739.3	1739.3	1735.8
5°	1722.6	1725.8	1735.8	1735.8	1732.6
7.5°	1712.6	1716.1	1722.6	1729.3	1725.8
10°	1699.4	1702.6	1709.4	1716.1	1716.1
12.5°	1676.2	1679.4	1692.6	1696.2	1696.2
15°	1652.7	1659.4	1669.4	1676.2	1679.4
17.5°	1623.0	1629.5	1642.7	1656.2	1656.2
20°	1593.0	1599.5	1616.2	1629.5	1632.7
22.5°	1556.3	1566.3	1583.1	1599.5	1606.3
25°	1519.9	1529.9	1546.3	1566.3	1573.1
27.5°	1476.4	1486.4	1509.9	1533.1	1536.3
30°	1433.2	1443.2	1473.2	1493.2	1503.1
32.5°	1380.1	1393.3	1423.2	1453.2	1463.2
35°	1330.1	1343.6	1376.8	1406.8	1420.0
37.5°	1276.9	1290.2	1326.9	1363.6	1380.1
40°	1217.0	1233.8	1276.9	1316.9	1340.1
42.5°	1160.6	1177.4	1220.6	1273.7	1296.9
45°	1097.5	1113.9	1167.4	1227.0	1257.0
47.5°	1030.8	1050.8	1113.9	1187.4	1217.0
50°	964.4	987.6	1057.5	1140.7	1173.8
52.5°	894.5	924.4	1004.4	1094.3	1133.9
55°	821.3	858.1	951.2	1047.5	1087.5
57.5°	751.4	784.9	894.5	997.6	1040.8
60°	675.0	718.2	841.3	947.6	994.4
62.5°	601.9	648.6	784.9	898.0	947.6
65°	538.7	585.1	725.0	844.5	898.0
67.5°	455.6	518.8	675.0	788.1	841.3
70°	372.5	458.8	611.9	728.2	778.2
72.5°	309.3	392.5	548.7	665.1	711.8
75°	236.2	329.3	482.4	581.9	611.9
77.5°	176.3	272.6	412.4	462.4	465.6
80°	129.9	209.4	312.6	329.3	342.5
82.5°	89.9	146.3	203.0	222.7	229.4
85°	56.4	86.4	116.3	126.3	126.3
87.5°	30.0	33.2	40.0	40.0	40.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)