

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: P474226

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474226
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65HE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4540.7 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

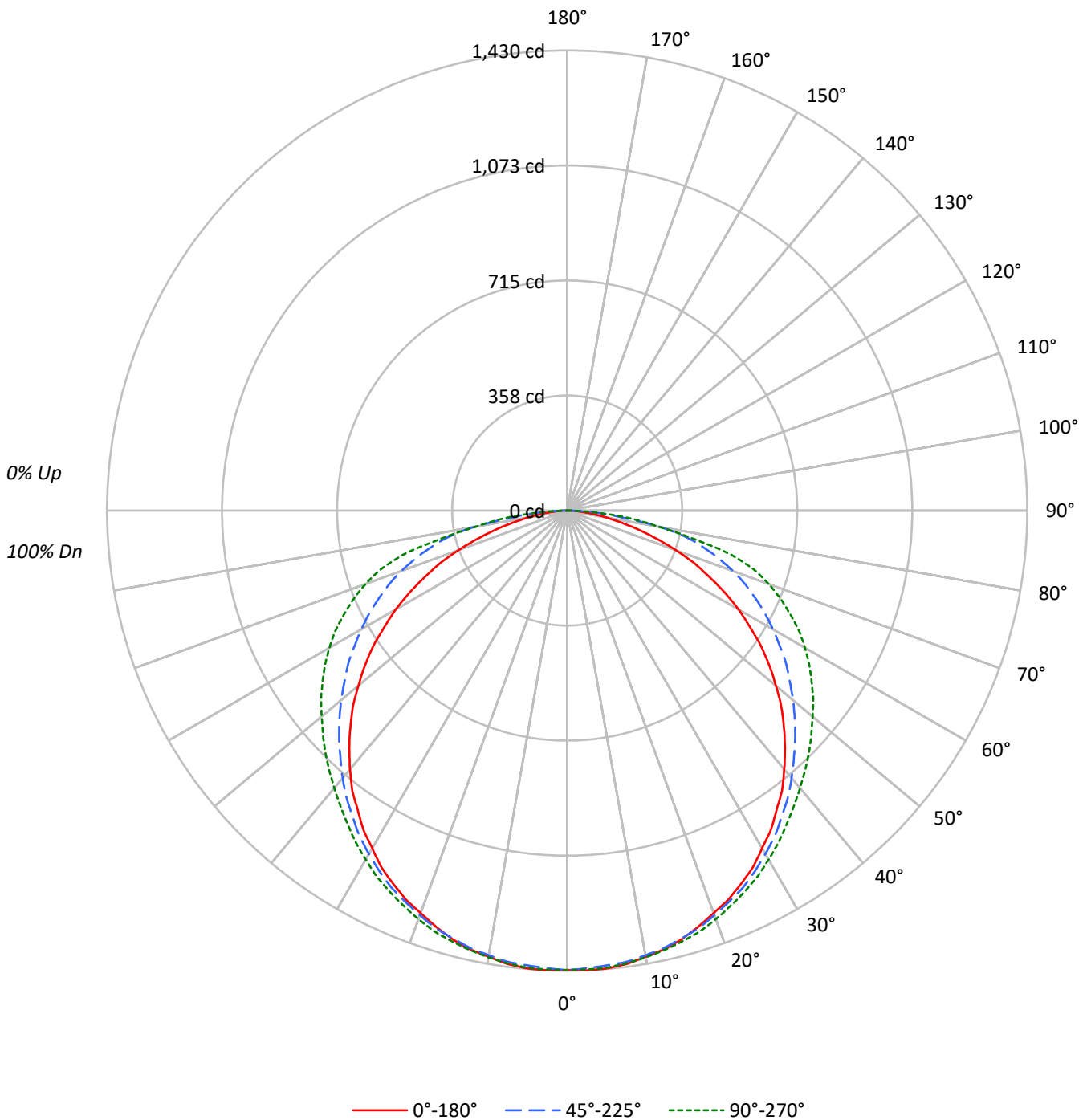
Input Watts (W): 48.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474226

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474226

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L835-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	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		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°	1921	1921	1921
5°	1929	1917	1926
10°	1923	1917	1926
15°	1920	1917	1930
20°	1906	1916	1935
25°	1899	1919	1939
30°	1883	1914	1945
35°	1864	1909	1953
40°	1844	1907	1978
45°	1813	1907	2022
50°	1773	1919	2084
55°	1727	1950	2177
60°	1655	1988	2297
65°	1549	2058	2438
70°	1409	2153	2622
75°	1194	2271	2740
80°	943	2286	2216
85°	696	1740	1948



TEST NUMBER: P474226

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	3.0
10°-20°	389.8	8.6
20°-30°	596.1	13.1
30°-40°	728.7	16.0
40°-50°	776.7	17.1
50°-60°	742.6	16.4
60°-70°	629.1	13.9
70°-80°	422.8	9.3
80°-90°	119.3	2.6
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°	1121.4	24.7
0°-40°	1850.1	40.7
0°-60°	3369.5	74.2
0°-90°	4540.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4540.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1428	1428	1428	1428	1428	
5°	1428	1426	1419	1426	1426	136
15°	1378	1378	1376	1387	1385	389
25°	1279	1284	1293	1304	1306	590
35°	1135	1144	1162	1185	1189	711
45°	953	968	1002	1045	1063	735
55°	736	764	831	896	928	656
65°	486	536	646	732	766	483
75°	230	313	437	511	527	246
85°	45	92	113	122	126	56
90°	0	0	0	0	0	



TEST NUMBER: P474226

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1428.0	1428.0	1428.0	1428.0	1428.0
2.5°	1430.2	1430.2	1423.5	1428.0	1428.0
5°	1428.0	1425.7	1419.0	1425.7	1425.7
7.5°	1421.2	1419.0	1414.5	1421.2	1419.0
10°	1407.7	1407.7	1403.2	1409.9	1409.9
12.5°	1396.4	1394.2	1391.9	1400.9	1398.7
15°	1378.4	1378.4	1376.1	1387.4	1385.2
17.5°	1355.9	1358.1	1360.4	1369.4	1371.6
20°	1331.1	1335.6	1337.8	1351.4	1351.4
22.5°	1308.5	1310.8	1315.3	1328.8	1328.8
25°	1279.3	1283.8	1292.8	1304.0	1306.3
27.5°	1250.0	1252.2	1263.5	1279.3	1281.5
30°	1211.7	1218.4	1231.9	1250.0	1252.2
32.5°	1177.8	1184.6	1200.4	1218.4	1222.9
35°	1135.0	1144.0	1162.1	1184.6	1189.1
37.5°	1096.7	1103.5	1126.0	1150.8	1157.6
40°	1049.6	1062.9	1085.5	1114.8	1126.0
42.5°	1002.3	1015.8	1042.9	1081.0	1094.5
45°	952.7	968.5	1002.3	1045.1	1062.9
47.5°	903.2	921.2	959.5	1009.1	1029.4
50°	846.8	869.4	916.7	973.0	995.5
52.5°	792.7	819.8	871.6	934.7	964.0
55°	736.4	763.5	831.1	896.4	927.9
57.5°	673.3	709.4	783.7	858.1	891.9
60°	615.0	648.5	738.7	819.8	853.6
62.5°	551.9	596.9	693.6	779.2	813.0
65°	486.5	536.1	646.3	731.9	765.7
67.5°	427.9	482.0	599.2	684.6	718.4
70°	358.1	425.7	547.3	632.8	666.6
72.5°	292.7	367.1	493.3	576.6	608.2
75°	229.6	313.0	436.9	511.3	527.1
77.5°	171.3	258.9	378.3	409.9	398.6
80°	121.7	207.3	295.0	279.2	286.0
82.5°	78.9	157.7	182.5	207.3	213.8
85°	45.1	92.4	112.7	121.7	126.2
87.5°	20.3	33.8	45.1	45.1	42.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)