

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: P274804

Luminaire Tested: **24CZ2-45-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P274804
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-RDP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2626.0 lumens
Efficiency: N/A
Efficacy: 61.2 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

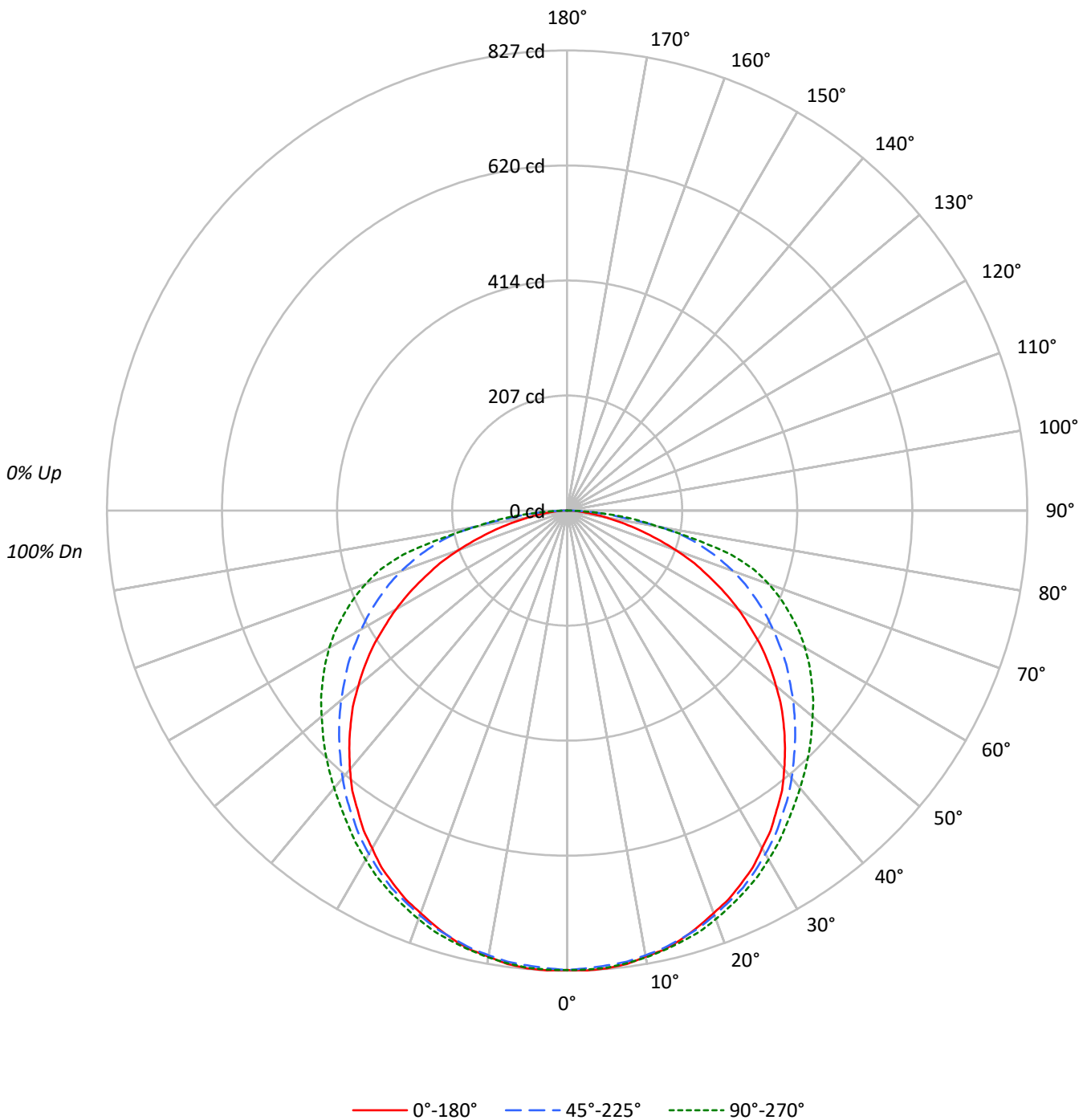
Input Watts (W): 42.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274804

CATALOG NUMBER: 24CZ2-45-RDP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P274804

CATALOG NUMBER: 24CZ2-45-RDP-UNV-L935-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°	1111	1111	1111
5°	1115	1108	1114
10°	1112	1109	1114
15°	1110	1109	1116
20°	1102	1108	1119
25°	1098	1110	1122
30°	1089	1107	1125
35°	1078	1104	1130
40°	1066	1103	1144
45°	1048	1103	1170
50°	1025	1110	1205
55°	999	1127	1259
60°	957	1150	1329
65°	896	1190	1410
70°	815	1245	1517
75°	691	1314	1585
80°	545	1322	1282
85°	403	1005	1125



TEST NUMBER: P274804

CATALOG NUMBER: 24CZ2-45-RDP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	3.0
10°-20°	225.4	8.6
20°-30°	344.8	13.1
30°-40°	421.5	16.0
40°-50°	449.2	17.1
50°-60°	429.5	16.4
60°-70°	363.8	13.9
70°-80°	244.5	9.3
80°-90°	69.0	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°	648.5	24.7
0°-40°	1070.0	40.7
0°-60°	1948.7	74.2
0°-90°	2626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	826	824	821	824	824	78
15°	797	797	796	802	801	225
25°	740	742	748	754	756	341
35°	656	662	672	685	688	411
45°	551	560	580	604	615	425
55°	426	442	481	518	537	379
65°	281	310	374	423	443	279
75°	133	181	253	296	305	142
85°	26	53	65	70	73	32
90°	0	0	0	0	0	



TEST NUMBER: P274804

CATALOG NUMBER: 24CZ2-45-RDP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	825.8	825.8	825.8	825.8	825.8
2.5°	827.1	827.1	823.2	825.8	825.8
5°	825.8	824.5	820.6	824.5	824.5
7.5°	821.9	820.6	818.0	821.9	820.6
10°	814.1	814.1	811.5	815.4	815.4
12.5°	807.6	806.3	805.0	810.2	808.9
15°	797.1	797.1	795.8	802.4	801.1
17.5°	784.1	785.4	786.7	791.9	793.2
20°	769.8	772.4	773.7	781.5	781.5
22.5°	756.8	758.1	760.7	768.5	768.5
25°	739.8	742.4	747.7	754.2	755.5
27.5°	722.9	724.2	730.7	739.8	741.1
30°	700.8	704.7	712.5	722.9	724.2
32.5°	681.2	685.1	694.2	704.7	707.3
35°	656.5	661.7	672.1	685.1	687.7
37.5°	634.3	638.2	651.3	665.6	669.5
40°	607.0	614.8	627.8	644.8	651.3
42.5°	579.6	587.4	603.1	625.2	633.0
45°	551.0	560.1	579.6	604.4	614.8
47.5°	522.3	532.7	554.9	583.5	595.3
50°	489.8	502.8	530.1	562.7	575.7
52.5°	458.5	474.1	504.1	540.5	557.5
55°	425.9	441.6	480.6	518.4	536.6
57.5°	389.5	410.3	453.3	496.3	515.8
60°	355.6	375.1	427.2	474.1	493.7
62.5°	319.1	345.2	401.2	450.7	470.2
65°	281.3	310.0	373.8	423.3	442.9
67.5°	247.5	278.7	346.5	396.0	415.5
70°	207.1	246.2	316.5	366.0	385.5
72.5°	169.3	212.3	285.3	333.4	351.7
75°	132.9	181.1	252.7	295.7	304.8
77.5°	99.0	149.8	218.8	237.1	230.5
80°	70.3	119.8	170.6	161.5	165.4
82.5°	45.6	91.2	105.5	119.8	123.7
85°	26.1	53.4	65.1	70.3	72.9
87.5°	11.7	19.5	26.1	26.1	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)