

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: P474264

Luminaire Tested: **24CZ2-45-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474264
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3076.4 lumens
Efficiency: N/A
Efficacy: 88.1 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

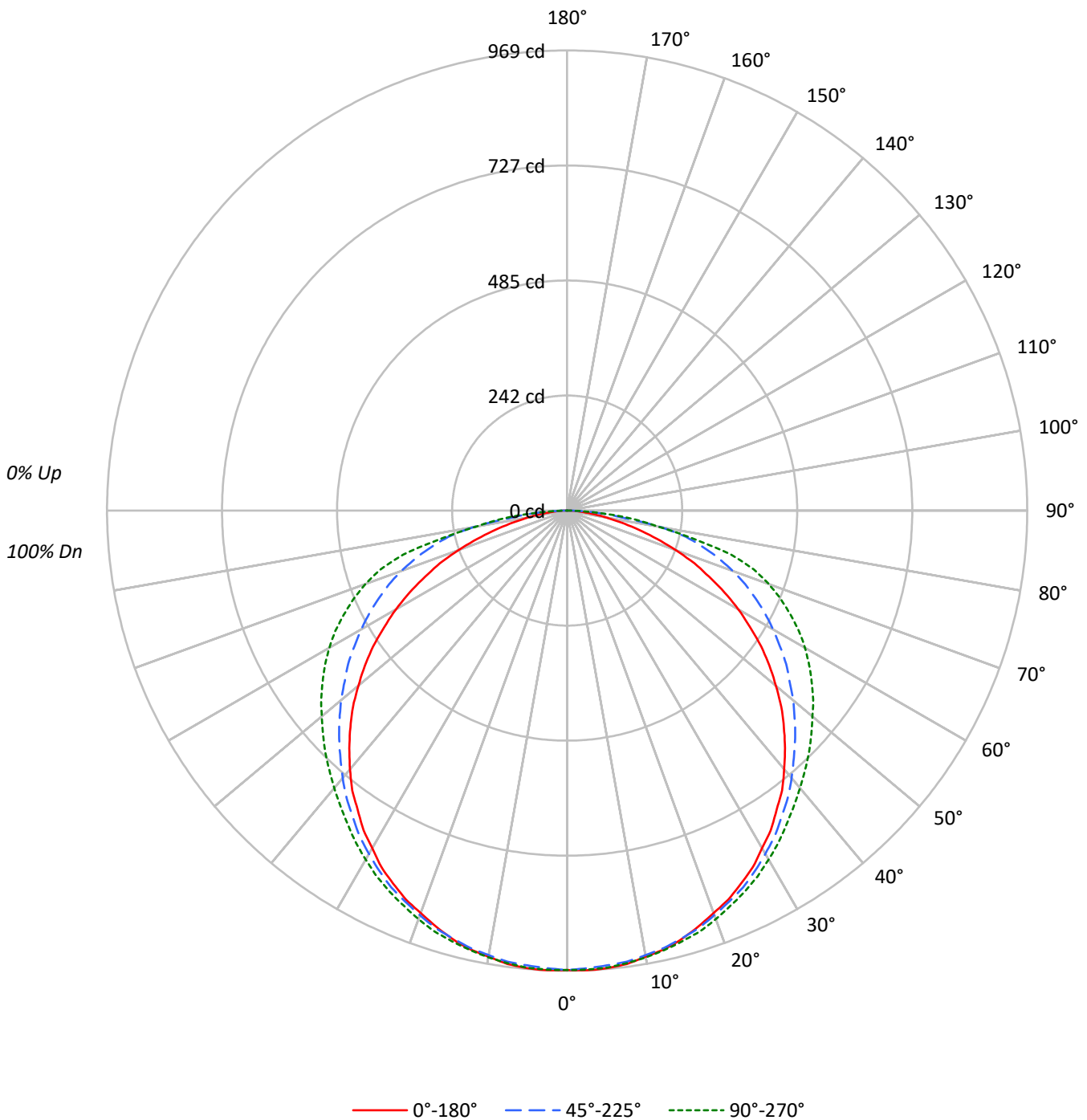
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1302	1302	1302
5°	1307	1298	1305
10°	1303	1299	1305
15°	1301	1299	1307
20°	1291	1298	1311
25°	1287	1300	1314
30°	1275	1297	1318
35°	1263	1293	1323
40°	1249	1292	1340
45°	1228	1292	1370
50°	1201	1300	1412
55°	1170	1321	1475
60°	1121	1347	1556
65°	1049	1394	1652
70°	954	1459	1777
75°	809	1539	1856
80°	638	1549	1501
85°	471	1178	1320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	3.0
10°-20°	264.1	8.6
20°-30°	403.9	13.1
30°-40°	493.7	16.0
40°-50°	526.3	17.1
50°-60°	503.1	16.4
60°-70°	426.2	13.9
70°-80°	286.5	9.3
80°-90°	80.8	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°	759.8	24.7
0°-40°	1253.5	40.7
0°-60°	2282.9	74.2
0°-90°	3076.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	968	968	968	968	968	
5°	968	966	961	966	966	92
15°	934	934	932	940	938	263
25°	867	870	876	884	885	399
35°	769	775	787	803	806	482
45°	646	656	679	708	720	498
55°	499	517	563	607	629	444
65°	330	363	438	496	519	327
75°	156	212	296	346	357	167
85°	30	63	76	82	86	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.5	967.5	967.5	967.5	967.5
2.5°	969.0	969.0	964.4	967.5	967.5
5°	967.5	966.0	961.4	966.0	966.0
7.5°	962.9	961.4	958.3	962.9	961.4
10°	953.8	953.8	950.7	955.3	955.3
12.5°	946.1	944.6	943.1	949.2	947.6
15°	933.9	933.9	932.4	940.0	938.5
17.5°	918.6	920.2	921.7	927.8	929.3
20°	901.8	904.9	906.4	915.6	915.6
22.5°	886.6	888.1	891.2	900.3	900.3
25°	866.7	869.8	875.9	883.5	885.1
27.5°	846.9	848.4	856.0	866.7	868.3
30°	820.9	825.5	834.7	846.9	848.4
32.5°	798.0	802.6	813.3	825.5	828.6
35°	769.0	775.1	787.3	802.6	805.7
37.5°	743.1	747.6	762.9	779.7	784.3
40°	711.2	720.2	735.4	755.3	762.9
42.5°	679.1	688.3	706.6	732.4	741.5
45°	645.5	656.2	679.1	708.1	720.2
47.5°	611.9	624.1	650.1	683.7	697.4
50°	573.7	589.0	621.1	659.2	674.5
52.5°	537.1	555.4	590.5	633.3	653.1
55°	498.9	517.3	563.1	607.3	628.7
57.5°	456.2	480.6	531.0	581.4	604.3
60°	416.6	439.4	500.5	555.4	578.3
62.5°	373.9	404.4	469.9	527.9	550.8
65°	329.6	363.2	437.9	495.9	518.8
67.5°	289.9	326.6	406.0	463.8	486.7
70°	242.6	288.4	370.8	428.7	451.6
72.5°	198.3	248.7	334.2	390.7	412.1
75°	155.6	212.1	296.0	346.4	357.1
77.5°	116.0	175.4	256.3	277.7	270.1
80°	82.4	140.5	199.9	189.2	193.7
82.5°	53.4	106.9	123.7	140.5	144.9
85°	30.5	62.6	76.3	82.4	85.5
87.5°	13.7	22.9	30.5	30.5	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)