

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: P272061

Luminaire Tested: **24CZ2-35HE-UNV-L930-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: P272061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2956.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

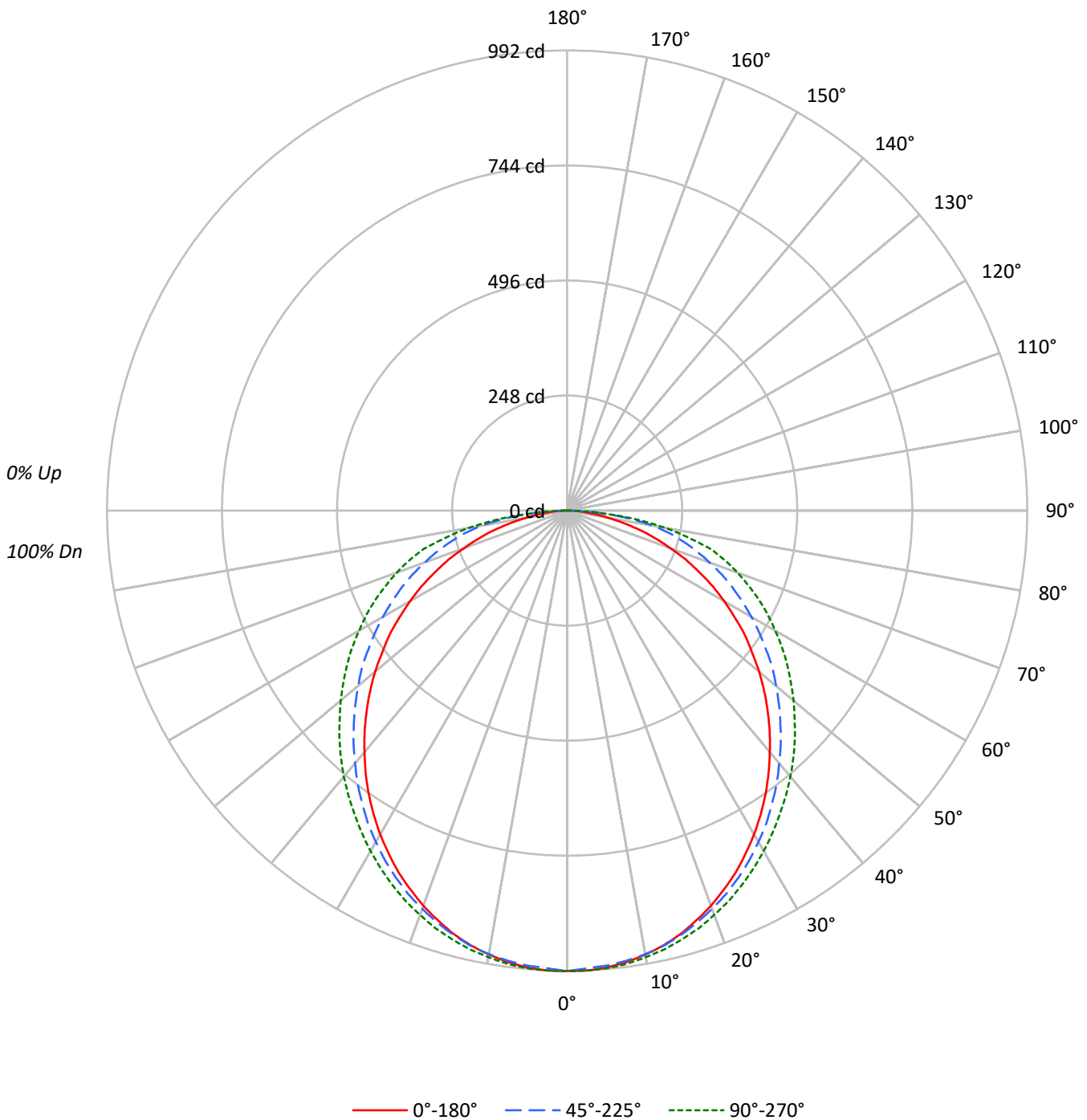
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	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	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1335	1335	1335
5°	1335	1330	1338
10°	1328	1326	1336
15°	1316	1319	1333
20°	1298	1308	1328
25°	1277	1296	1323
30°	1252	1281	1317
35°	1225	1266	1313
40°	1194	1249	1315
45°	1164	1237	1322
50°	1132	1231	1334
55°	1097	1229	1358
60°	1054	1234	1394
65°	999	1253	1454
70°	928	1284	1537
75°	846	1349	1667
80°	696	1452	1667
85°	533	1340	1431



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	3.2
10°-20°	268.0	9.1
20°-30°	403.3	13.6
30°-40°	483.3	16.3
40°-50°	503.6	17.0
50°-60°	468.5	15.9
60°-70°	385.9	13.1
70°-80°	262.8	8.9
80°-90°	86.8	2.9
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°	765.1	25.9
0°-40°	1248.4	42.2
0°-60°	2220.5	75.1
0°-90°	2956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	988	988	985	990	990	94
15°	945	946	947	956	957	266
25°	860	864	873	888	891	396
35°	746	755	770	791	799	466
45°	612	624	650	683	694	472
55°	468	483	524	565	579	417
65°	314	340	394	440	457	311
75°	163	199	260	306	321	172
85°	34	67	87	93	93	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	992.5	992.5	992.5	992.5	992.5
2.5°	992.5	992.5	987.5	992.5	992.5
5°	988.5	988.5	984.6	989.5	990.5
7.5°	981.6	982.6	978.7	984.6	985.6
10°	971.7	972.7	970.8	976.7	977.7
12.5°	959.9	960.9	960.9	967.8	968.8
15°	945.1	946.1	947.1	956.0	957.0
17.5°	926.4	929.3	931.3	942.2	944.1
20°	906.6	909.6	913.5	925.4	927.4
22.5°	883.9	887.9	894.8	907.6	910.6
25°	860.3	864.2	873.1	887.9	890.9
27.5°	833.6	839.6	850.4	866.2	870.1
30°	806.0	811.9	824.8	841.5	847.4
32.5°	776.4	784.3	799.1	817.8	823.8
35°	745.8	754.7	770.5	791.2	799.1
37.5°	713.3	723.1	741.9	764.6	774.4
40°	679.7	691.6	711.3	737.9	748.8
42.5°	646.2	657.0	681.7	710.3	722.2
45°	611.7	624.5	650.1	682.7	694.5
47.5°	576.1	589.0	619.6	654.1	664.9
50°	540.6	553.5	588.0	624.5	637.3
52.5°	502.2	518.9	558.4	594.9	607.7
55°	467.6	483.4	523.9	565.3	579.1
57.5°	428.2	446.9	491.3	534.7	549.5
60°	391.7	411.4	458.7	503.1	517.9
62.5°	354.2	375.9	426.2	471.6	488.3
65°	313.7	340.4	393.6	440.0	456.8
67.5°	277.2	304.8	361.1	408.4	423.2
70°	235.8	269.3	326.5	373.9	390.7
72.5°	200.3	233.8	294.0	340.4	357.1
75°	162.8	199.3	259.5	305.8	320.6
77.5°	125.3	165.7	225.9	261.4	266.4
80°	89.8	132.2	187.4	208.2	215.1
82.5°	63.1	101.6	138.1	151.9	155.9
85°	34.5	67.1	86.8	92.7	92.7
87.5°	14.8	28.6	34.5	35.5	36.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)