

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: P275975

Luminaire Tested: **24CZ2-35HE-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275975
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-L93050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3109.3 lumens
Efficiency: N/A
Efficacy: 123.4 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

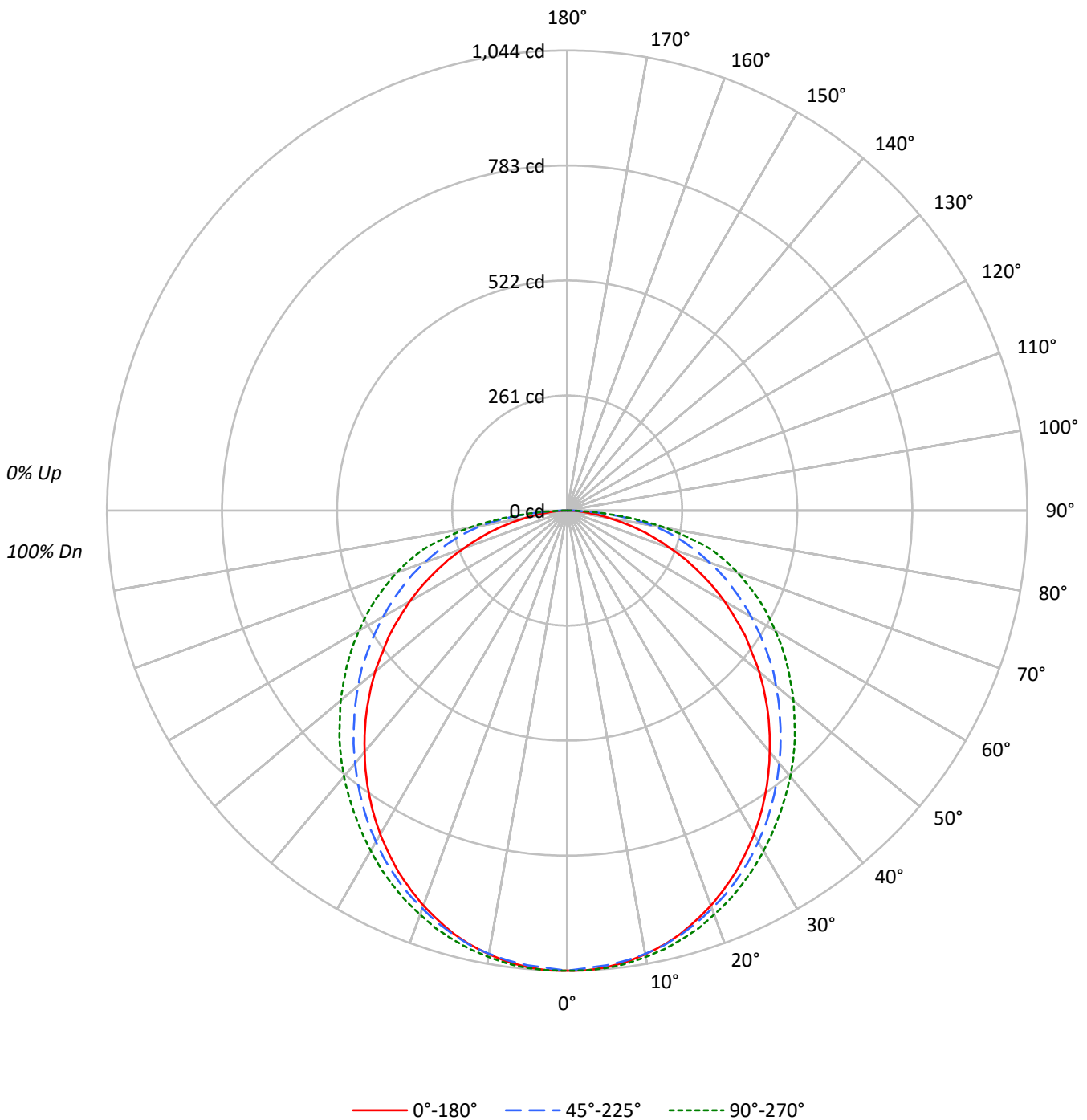
Input Watts (W): 25.19556
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1405	1405	1405
5°	1404	1399	1407
10°	1396	1395	1405
15°	1385	1388	1402
20°	1365	1376	1397
25°	1343	1363	1391
30°	1317	1348	1385
35°	1289	1331	1381
40°	1256	1314	1383
45°	1224	1301	1390
50°	1190	1295	1403
55°	1154	1293	1429
60°	1109	1298	1466
65°	1051	1318	1530
70°	976	1351	1616
75°	890	1419	1753
80°	731	1528	1753
85°	560	1409	1505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.7	3.2
10°-20°	281.9	9.1
20°-30°	424.2	13.6
30°-40°	508.3	16.3
40°-50°	529.7	17.0
50°-60°	492.8	15.9
60°-70°	405.9	13.1
70°-80°	276.4	8.9
80°-90°	91.3	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°	804.8	25.9
0°-40°	1313.1	42.2
0°-60°	2335.6	75.1
0°-90°	3109.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3109.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1040	1040	1036	1041	1042	99
15°	994	995	996	1006	1007	280
25°	905	909	918	934	937	417
35°	784	794	810	832	840	490
45°	643	657	684	718	730	496
55°	492	508	551	595	609	438
65°	330	358	414	463	480	328
75°	171	210	273	322	337	181
85°	36	71	91	98	98	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1043.9	1043.9	1043.9	1043.9	1043.9
2.5°	1043.9	1043.9	1038.7	1043.9	1043.9
5°	1039.8	1039.8	1035.6	1040.8	1041.8
7.5°	1032.5	1033.5	1029.4	1035.6	1036.7
10°	1022.1	1023.2	1021.1	1027.3	1028.4
12.5°	1009.7	1010.7	1010.7	1018.0	1019.0
15°	994.1	995.2	996.2	1005.5	1006.6
17.5°	974.4	977.5	979.6	991.0	993.1
20°	953.6	956.8	960.9	973.4	975.4
22.5°	929.8	933.9	941.2	954.7	957.8
25°	904.9	909.0	918.4	933.9	937.0
27.5°	876.9	883.1	894.5	911.1	915.2
30°	847.8	854.0	867.5	885.2	891.4
32.5°	816.7	825.0	840.5	860.3	866.5
35°	784.5	793.8	810.4	832.2	840.5
37.5°	750.3	760.6	780.3	804.2	814.6
40°	715.0	727.4	748.2	776.2	787.6
42.5°	679.7	691.1	717.0	747.1	759.6
45°	643.4	656.9	683.8	718.1	730.5
47.5°	606.0	619.5	651.7	688.0	699.4
50°	568.7	582.1	618.5	656.9	670.4
52.5°	528.2	545.8	587.3	625.7	639.2
55°	491.9	508.5	551.0	594.6	609.1
57.5°	450.4	470.1	516.8	562.4	578.0
60°	412.0	432.7	482.5	529.2	544.8
62.5°	372.5	395.4	448.3	496.0	513.7
65°	330.0	358.0	414.0	462.8	480.5
67.5°	291.6	320.6	379.8	429.6	445.2
70°	248.0	283.3	343.5	393.3	410.9
72.5°	210.7	245.9	309.2	358.0	375.6
75°	171.2	209.6	272.9	321.7	337.3
77.5°	131.8	174.3	237.6	275.0	280.2
80°	94.4	139.1	197.2	219.0	226.2
82.5°	66.4	106.9	145.3	159.8	164.0
85°	36.3	70.6	91.3	97.5	97.5
87.5°	15.6	30.1	36.3	37.4	38.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)