

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: P#

Luminaire Tested: **24CZ-LD5-65SE-RDP-UNV-L840-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: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65SE-RDP-UNV-L840-CD1-U
Description:

Light Source: -
Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

Summary

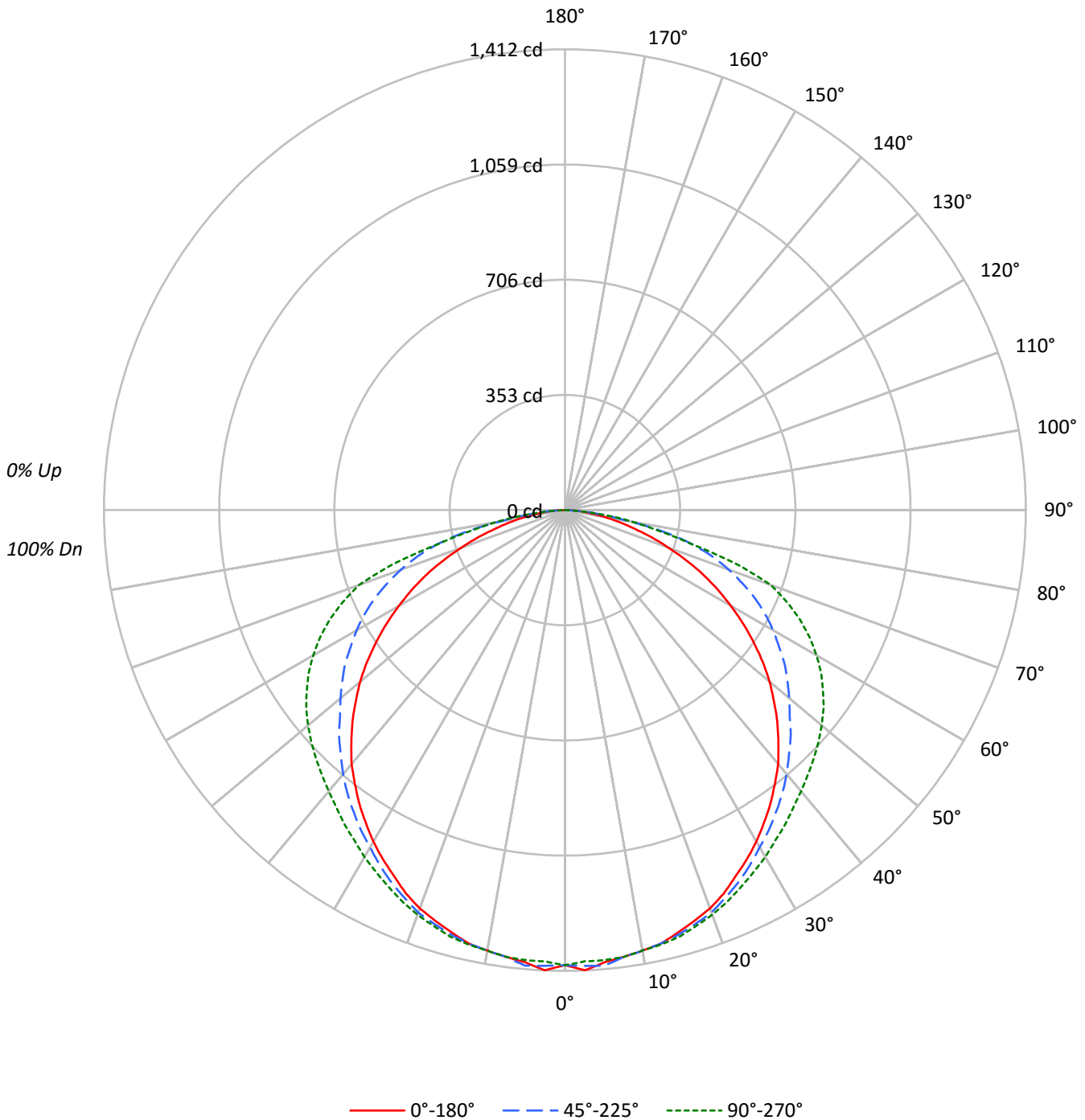
Lumens per Lamp: N/A
Luminaire Lumens: 4390.7 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 60
Input Voltage (V): NR
Input Current (A_{in}): 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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1876	1876	1876
5°	1875	1884	1862
10°	1864	1855	1856
15°	1854	1850	1861
20°	1843	1844	1856
25°	1816	1823	1850
30°	1796	1799	1854
35°	1772	1787	1867
40°	1748	1777	1897
45°	1709	1768	1953
50°	1664	1766	2028
55°	1599	1792	2113
60°	1513	1815	2204
65°	1411	1842	2284
70°	1243	1838	2323
75°	1054	1761	1763
80°	856	1199	1317
85°	656	656	603



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.4	3.0
10°-20°	380.3	8.7
20°-30°	579.5	13.2
30°-40°	709.0	16.1
40°-50°	762.9	17.4
50°-60°	739.0	16.8
60°-70°	626.0	14.3
70°-80°	378.4	8.6
80°-90°	83.2	1.9
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°	1092.2	24.9
0°-40°	1801.2	41.0
0°-60°	3303.1	75.2
0°-90°	4390.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4390.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1395	1395	1395	1395	1395	
5°	1391	1391	1401	1395	1384	132
15°	1340	1344	1347	1350	1354	378
25°	1238	1245	1258	1268	1275	571
35°	1098	1105	1129	1159	1176	687
45°	921	938	979	1040	1078	710
55°	706	736	822	917	965	631
65°	467	518	644	747	794	460
75°	222	300	406	413	402	238
85°	55	65	68	65	61	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1394.6	1394.6	1394.6	1394.6	1394.6
2.5°	1411.7	1408.3	1398.0	1391.2	1384.4
5°	1391.2	1391.2	1401.4	1394.6	1384.4
7.5°	1381.0	1381.0	1381.0	1398.0	1381.0
10°	1370.7	1374.2	1370.7	1384.4	1370.7
12.5°	1360.5	1360.5	1360.5	1363.9	1363.9
15°	1340.1	1343.5	1346.9	1350.3	1353.7
17.5°	1319.6	1323.0	1329.8	1333.2	1336.6
20°	1299.1	1302.5	1312.8	1312.8	1319.6
22.5°	1271.9	1271.9	1285.5	1288.9	1299.1
25°	1237.8	1244.6	1258.2	1268.5	1275.3
27.5°	1207.1	1213.9	1227.5	1241.2	1251.4
30°	1173.0	1179.8	1193.4	1213.9	1227.5
32.5°	1135.5	1142.3	1162.7	1186.6	1200.3
35°	1098.0	1104.8	1128.6	1159.3	1176.4
37.5°	1057.0	1067.3	1094.5	1128.6	1149.1
40°	1016.1	1026.4	1057.0	1094.5	1125.2
42.5°	968.4	982.0	1016.1	1067.3	1101.4
45°	920.6	937.7	978.6	1040.0	1077.5
47.5°	869.5	886.6	934.3	1012.7	1053.6
50°	818.4	838.8	896.8	982.0	1026.4
52.5°	763.8	784.3	859.3	951.3	999.1
55°	705.8	736.5	821.8	917.2	965.0
57.5°	647.9	682.0	777.4	879.7	930.9
60°	586.5	627.4	736.5	838.8	890.0
62.5°	528.5	572.8	692.2	794.5	845.6
65°	467.1	518.3	644.5	746.7	794.5
67.5°	402.4	467.1	589.9	688.8	736.5
70°	337.6	412.6	535.3	627.4	671.7
72.5°	279.6	358.0	474.0	552.4	552.4
75°	221.6	300.1	405.8	412.6	402.4
77.5°	170.5	245.5	317.1	289.8	296.7
80°	126.2	187.5	201.2	211.4	218.2
82.5°	85.2	126.2	129.6	136.4	136.4
85°	54.6	64.8	68.2	64.8	61.4
87.5°	23.9	27.3	20.5	13.6	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)