

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P273757

Luminaire Tested: **8RCG-4-78D-L830**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1804-709-7-R2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8RCG-4-78D-L830  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH FROST FLUSH LENS  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

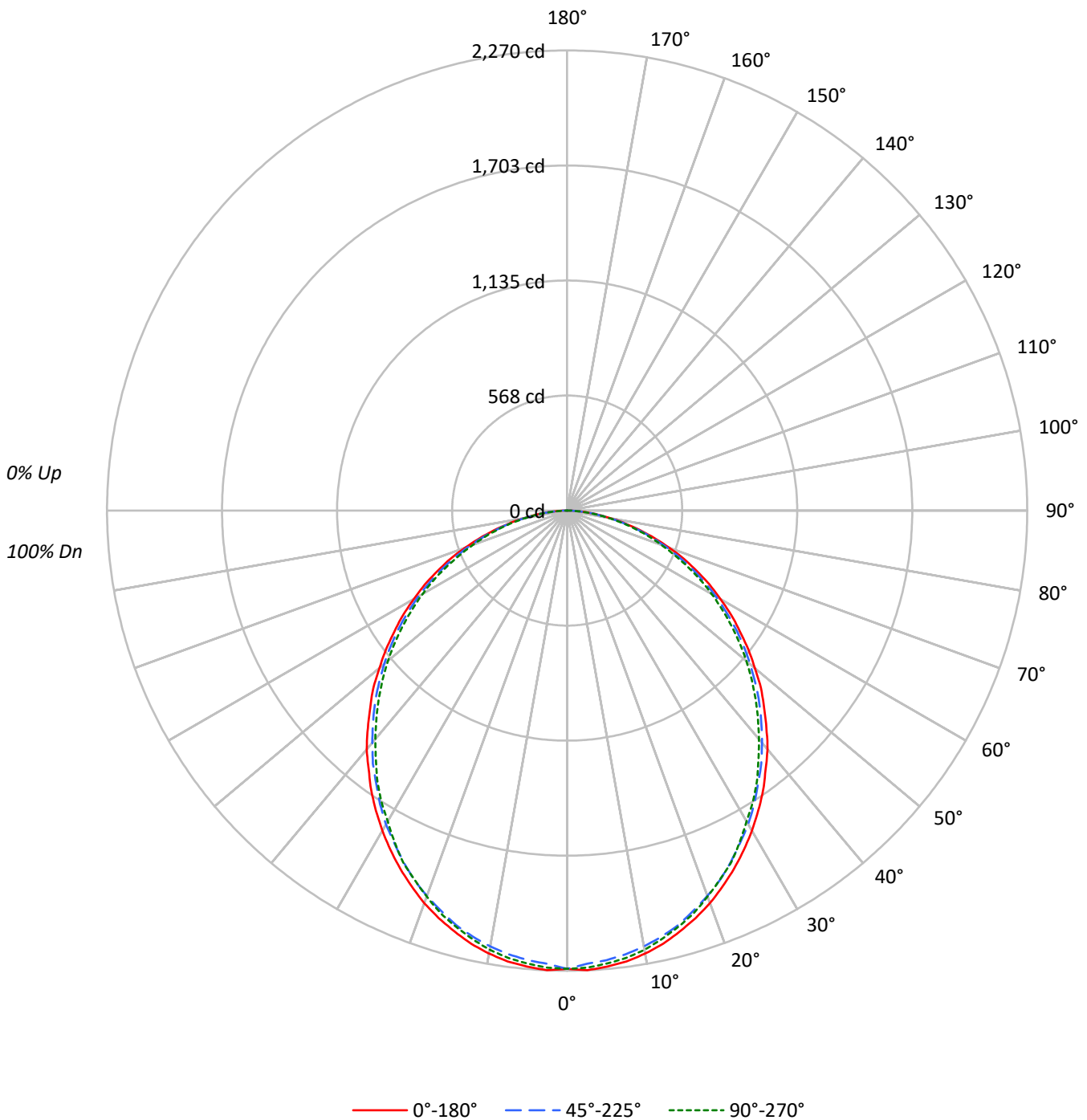
Lumens per Lamp: N/A  
Luminaire Lumens: 5832.4 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.23' x L: 7.88' x H: 0')  
CIE Type: Direct

Input Watts (W): 52  
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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76		82	78	74		79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42		53	46	41		52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33		45	38	33		43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27		38	32	27		37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13481	13481	13481
5°	13521	13329	13430
10°	13438	13221	13323
15°	13270	13072	13118
20°	13078	12838	12862
25°	12828	12579	12604
30°	12554	12307	12190
35°	12270	11956	11886
40°	11976	11638	11463
45°	11591	11305	11084
50°	11213	10932	10704
55°	10821	10546	10272
60°	10411	10118	9827
65°	9950	9577	9258
70°	9337	8943	8611
75°	8559	8209	7950
80°	7508	7254	6993
85°	6323	6186	5680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.8	3.6
10°-20°	600.4	10.3
20°-30°	885.7	15.2
30°-40°	1033.3	17.7
40°-50°	1036.7	17.8
50°-60°	908.2	15.6
60°-70°	673.3	11.5
70°-80°	378.7	6.5
80°-90°	103.2	1.8
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°	1698.9	29.1
0°-40°	2732.2	46.8
0°-60°	4677.2	80.2
0°-90°	5832.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5832.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2260	2260	2260	2260	2260	
5°	2258	2251	2226	2249	2243	214
15°	2149	2143	2117	2128	2124	606
25°	1949	1938	1911	1917	1915	897
35°	1685	1672	1642	1636	1632	1053
45°	1374	1369	1340	1325	1314	1061
55°	1041	1041	1014	995	988	932
65°	705	697	679	662	656	699
75°	371	364	356	351	345	393
85°	92	92	90	87	83	108
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2260.2	2260.2	2260.2	2260.2	2260.2
2.5°	2269.6	2262.2	2237.6	2258.4	2256.4
5°	2258.4	2250.8	2226.2	2249.0	2243.2
7.5°	2243.2	2233.8	2207.4	2228.2	2226.2
10°	2218.8	2209.4	2183.0	2201.8	2199.8
12.5°	2188.6	2179.2	2152.8	2167.8	2164.0
15°	2149.0	2143.4	2117.0	2128.2	2124.4
17.5°	2107.6	2098.0	2069.8	2081.2	2081.2
20°	2060.4	2051.0	2022.6	2034.0	2026.4
22.5°	2005.8	1994.4	1971.8	1977.4	1970.0
25°	1949.2	1937.8	1911.4	1917.2	1915.2
27.5°	1887.0	1875.6	1847.4	1847.4	1843.6
30°	1822.8	1813.4	1787.0	1779.6	1770.0
32.5°	1755.0	1741.8	1717.4	1711.6	1704.2
35°	1685.2	1672.0	1642.0	1636.2	1632.4
37.5°	1608.0	1598.6	1574.0	1559.0	1549.6
40°	1538.2	1523.2	1494.8	1481.6	1472.2
42.5°	1455.2	1447.8	1417.6	1404.4	1393.0
45°	1374.2	1368.6	1340.2	1325.2	1314.0
47.5°	1297.0	1287.6	1259.2	1240.4	1234.8
50°	1208.4	1202.6	1178.2	1161.2	1153.6
52.5°	1127.2	1121.6	1097.2	1078.2	1070.8
55°	1040.6	1040.6	1014.2	995.4	987.8
57.5°	961.4	953.8	929.4	914.2	904.8
60°	872.8	867.2	848.2	827.6	823.8
62.5°	791.8	784.2	761.6	746.4	742.8
65°	705.0	697.4	678.6	661.6	656.0
67.5°	624.0	610.8	595.6	580.6	573.0
70°	535.4	527.8	512.8	501.4	493.8
72.5°	450.6	443.0	433.6	424.2	420.4
75°	371.4	363.8	356.2	350.6	345.0
77.5°	292.2	288.4	282.8	275.2	275.2
80°	218.6	214.8	211.2	205.4	203.6
82.5°	152.6	150.8	147.0	145.2	145.2
85°	92.4	92.4	90.4	86.8	83.0
87.5°	41.4	37.8	37.8	34.0	34.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)