

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: NEO-RAY

Report Number: P242713

Luminaire Tested: **S124RDR-S795D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3047.4 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

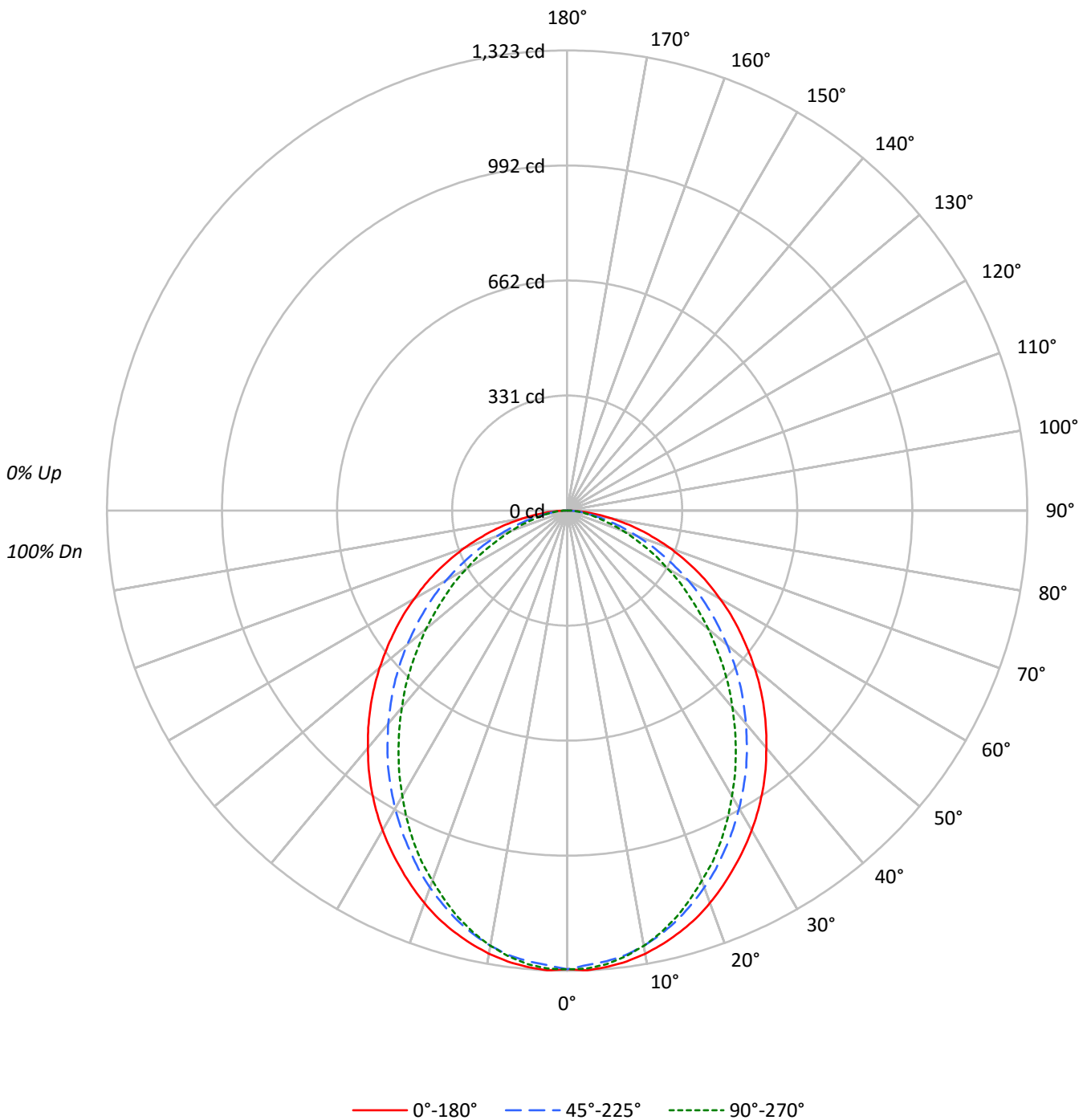
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47					47			
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41					41			
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37					37			
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33					33			
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30					30			
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11724	11724	11724
5°	11751	11606	11678
10°	11676	11467	11467
15°	11543	11226	11142
20°	11358	10910	10709
25°	11123	10539	10271
30°	10894	10148	9723
35°	10641	9742	9173
40°	10335	9281	8577
45°	10054	8823	7972
50°	9734	8296	7332
55°	9390	7747	6636
60°	9013	7145	5925
65°	8666	6394	5225
70°	8163	5564	4436
75°	7525	4612	3606
80°	6568	3517	3307
85°	5558	3192	2988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.0	4.1
10°-20°	345.8	11.3
20°-30°	499.2	16.4
30°-40°	565.8	18.6
40°-50°	546.3	17.9
50°-60°	454.2	14.9
60°-70°	313.5	10.3
70°-80°	158.4	5.2
80°-90°	40.2	1.3
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°	969.1	31.8
0°-40°	1534.9	50.4
0°-60°	2535.3	83.2
0°-90°	3047.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3047.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1319	1319	1319	1319	1319	
5°	1317	1313	1301	1311	1309	125
15°	1254	1245	1220	1218	1211	353
25°	1134	1116	1074	1057	1047	523
35°	981	948	898	863	845	613
45°	800	762	702	652	634	617
55°	606	566	500	447	428	542
65°	412	369	304	260	248	407
75°	219	182	134	111	105	231
85°	54	34	31	29	29	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1318.9	1318.9	1318.9	1318.9	1318.9
2.5°	1322.9	1318.9	1307.8	1318.9	1317.9
5°	1316.9	1312.8	1300.7	1310.8	1308.8
7.5°	1307.8	1303.7	1288.6	1295.7	1292.6
10°	1293.6	1288.6	1270.4	1274.4	1270.4
12.5°	1275.5	1269.4	1247.2	1249.2	1243.1
15°	1254.3	1245.2	1219.9	1217.9	1210.8
17.5°	1230.0	1216.9	1187.6	1182.6	1172.5
20°	1200.7	1187.6	1153.3	1145.2	1132.1
22.5°	1168.4	1153.3	1115.9	1102.8	1092.7
25°	1134.1	1115.9	1074.5	1057.3	1047.2
27.5°	1098.7	1076.5	1033.1	1012.9	998.8
30°	1061.4	1036.1	988.7	963.4	947.3
32.5°	1022.0	992.7	943.2	912.9	897.8
35°	980.6	948.3	897.8	863.4	845.3
37.5°	937.2	903.8	848.3	810.9	792.7
40°	890.7	857.4	799.8	757.4	739.2
42.5°	846.3	810.9	750.3	706.9	687.7
45°	799.8	762.4	701.9	652.4	634.2
47.5°	752.3	714.0	651.4	599.9	579.7
50°	703.9	664.5	599.9	549.4	530.2
52.5°	654.4	616.0	549.4	497.9	477.7
55°	605.9	565.5	499.9	447.4	428.2
57.5°	558.5	516.0	451.4	397.9	383.7
60°	507.0	466.6	401.9	349.4	333.3
62.5°	460.5	418.1	351.4	304.0	291.9
65°	412.0	368.6	304.0	260.5	248.4
67.5°	361.5	320.1	259.5	221.2	207.0
70°	314.1	271.7	214.1	180.8	170.7
72.5°	263.6	226.2	172.7	145.4	136.3
75°	219.1	181.8	134.3	111.1	105.0
77.5°	172.7	140.4	100.0	83.8	81.8
80°	128.3	99.0	68.7	65.6	64.6
82.5°	89.9	63.6	49.5	47.5	46.5
85°	54.5	34.3	31.3	29.3	29.3
87.5°	23.2	15.1	14.1	13.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)