

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: P243573

Luminaire Tested: **S124RDR-H795D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-65)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3012.7 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

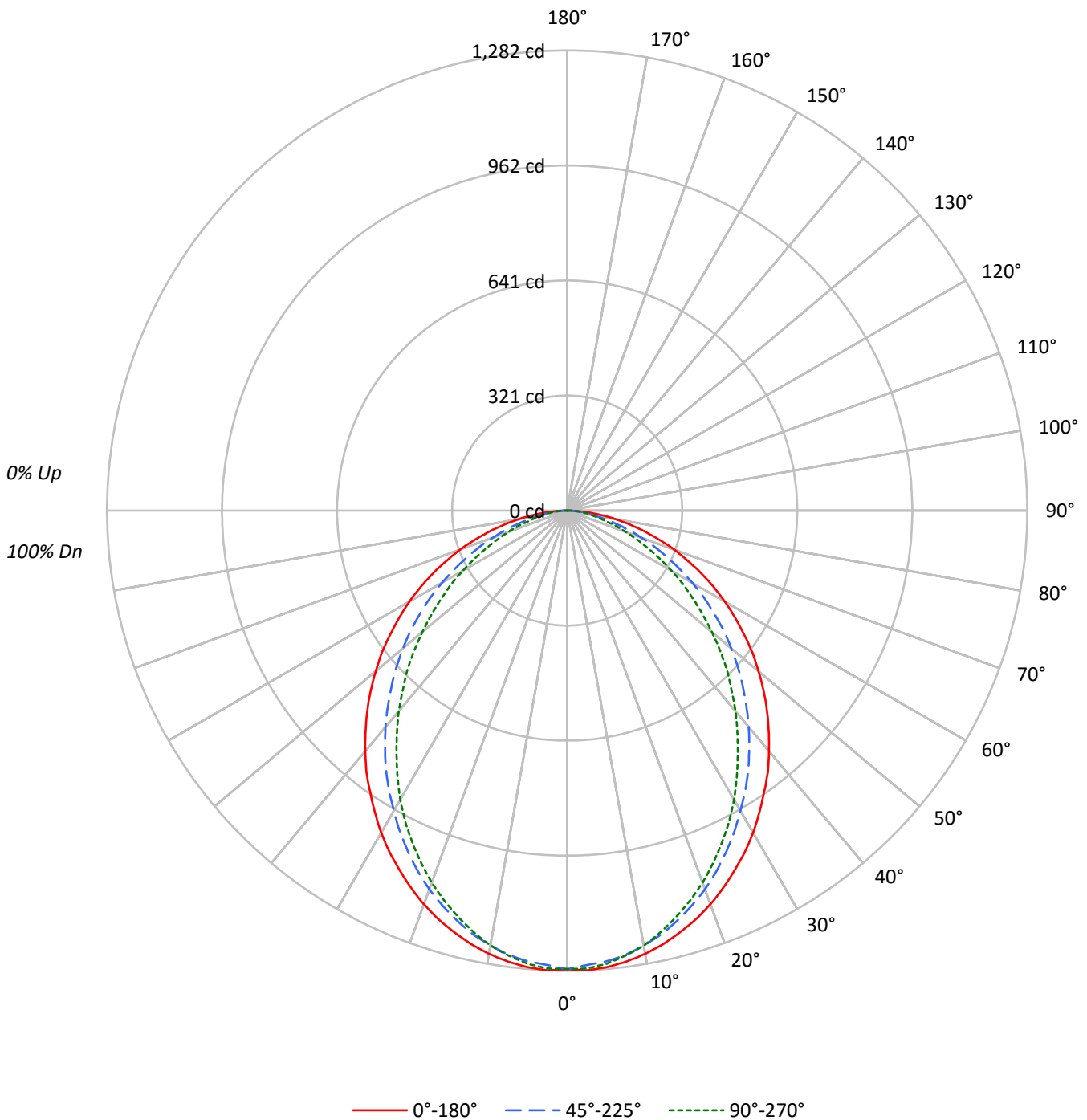
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11356	11356	11356
5°	11392	11248	11307
10°	11319	11107	11107
15°	11193	10889	10785
20°	11042	10623	10436
25°	10839	10284	10006
30°	10636	9910	9542
35°	10385	9546	8994
40°	10153	9136	8468
45°	9897	8700	7918
50°	9623	8253	7275
55°	9323	7744	6634
60°	9035	7157	5968
65°	8647	6466	5216
70°	8233	5710	4533
75°	7611	4760	3692
80°	6951	3716	3378
85°	6150	3559	3366



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	4.0
10°-20°	335.5	11.1
20°-30°	486.6	16.2
30°-40°	554.6	18.4
40°-50°	539.6	17.9
50°-60°	453.3	15.0
60°-70°	315.8	10.5
70°-80°	163.1	5.4
80°-90°	44.1	1.5
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°	942.3	31.3
0°-40°	1496.9	49.7
0°-60°	2489.7	82.6
0°-90°	3012.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3012.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1277	1273	1261	1270	1267	121
15°	1216	1207	1183	1181	1172	343
25°	1105	1084	1048	1033	1020	509
35°	957	928	880	847	829	599
45°	787	750	692	648	630	607
55°	602	563	500	449	428	539
65°	411	372	307	263	248	407
75°	222	188	139	116	108	236
85°	60	39	35	33	33	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1277.6	1277.6	1277.6	1277.6	1277.6
2.5°	1282.3	1278.6	1267.2	1277.6	1276.7
5°	1276.7	1272.9	1260.6	1270.1	1267.2
7.5°	1267.2	1262.5	1248.4	1255.0	1250.3
10°	1254.0	1249.3	1230.5	1235.2	1230.5
12.5°	1237.1	1230.5	1209.7	1210.7	1203.1
15°	1216.3	1206.9	1183.3	1181.4	1172.0
17.5°	1193.7	1181.4	1154.1	1149.4	1139.0
20°	1167.3	1152.2	1123.0	1112.6	1103.2
22.5°	1137.1	1119.2	1087.2	1074.9	1062.6
25°	1105.1	1084.3	1048.5	1033.4	1020.2
27.5°	1072.1	1047.6	1008.9	990.0	976.8
30°	1036.2	1007.9	965.5	943.8	929.7
32.5°	996.6	968.3	924.0	897.6	879.7
35°	957.0	927.8	879.7	846.7	828.8
37.5°	918.4	885.4	833.5	799.6	778.8
40°	875.0	840.1	787.3	748.7	729.8
42.5°	831.6	795.8	739.2	698.7	677.9
45°	787.3	749.6	692.1	647.8	629.9
47.5°	742.1	704.3	644.9	598.7	578.0
50°	695.9	658.1	596.8	545.9	526.1
52.5°	650.6	611.0	549.7	497.8	477.1
55°	601.6	562.9	499.7	448.8	428.1
57.5°	554.4	513.9	452.6	400.7	383.8
60°	508.2	467.7	402.6	352.6	335.7
62.5°	459.2	418.6	354.5	306.4	291.4
65°	411.1	371.5	307.4	263.1	248.0
67.5°	362.1	326.2	264.0	221.6	209.3
70°	316.8	276.3	219.7	182.9	174.4
72.5°	268.7	232.9	178.2	148.0	141.4
75°	221.6	187.6	138.6	116.0	107.5
77.5°	178.2	145.2	104.7	85.8	85.8
80°	135.8	106.5	72.6	67.9	66.0
82.5°	96.2	68.8	53.7	50.0	49.0
85°	60.3	38.7	34.9	33.0	33.0
87.5°	29.2	17.9	17.9	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)