

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059025

Luminaire Tested: S123RDR-S1000D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059025
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

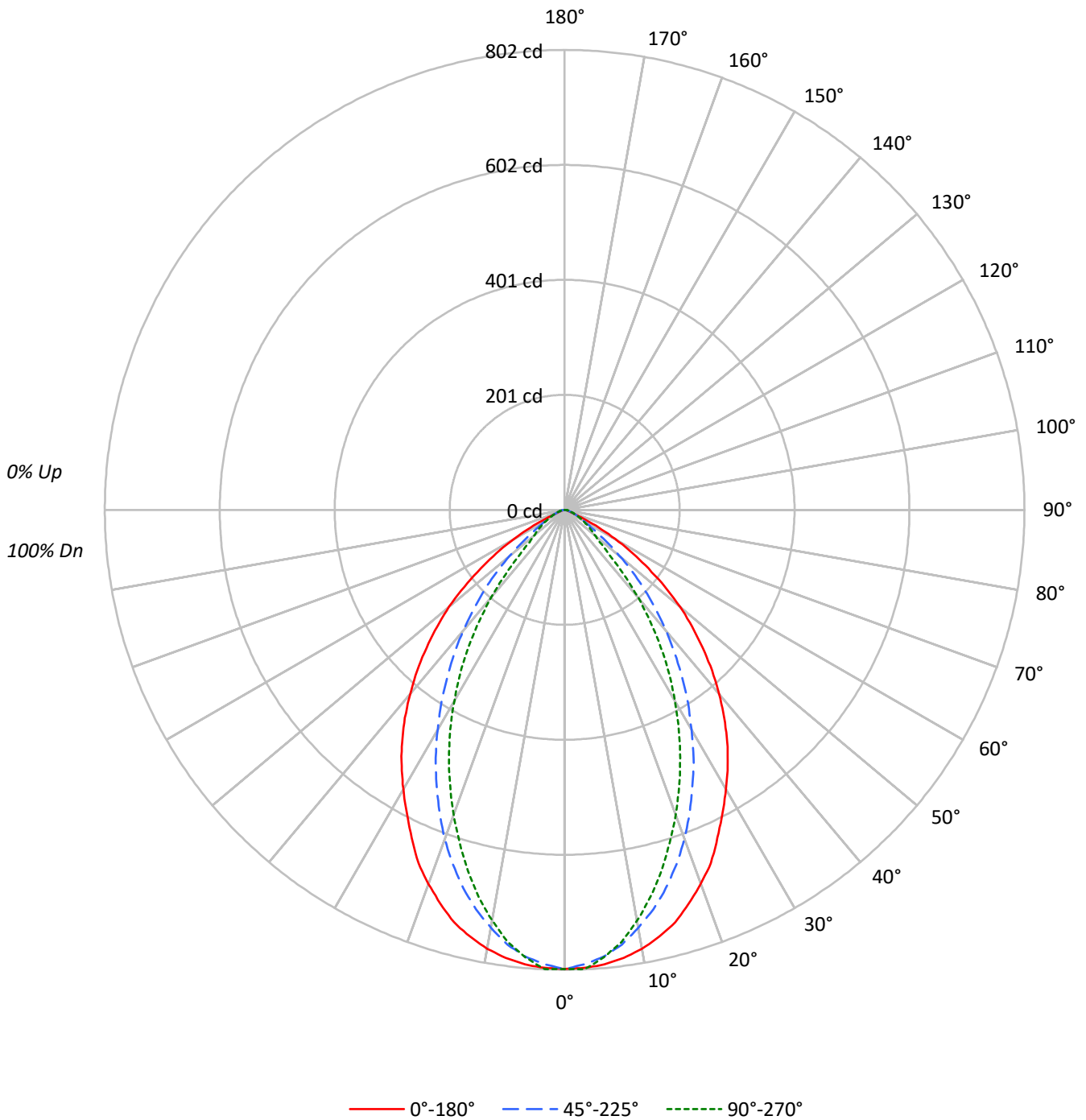
Lumens per Lamp: N/A
Luminaire Lumens: 1033.7 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: 24 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									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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91													91															
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82													82															
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73													73															
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66													66															
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60													60															
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55													55															
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50													50															
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46													46															
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42													42															
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39													39															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9402	9402	9402
5°	9379	9219	9233
10°	9266	8822	8676
15°	9055	8302	7925
20°	8674	7635	7078
25°	8174	6841	6183
30°	7630	6000	5209
35°	7089	5118	4193
40°	6421	4218	3040
45°	5659	3273	1832
50°	4801	2287	1246
55°	3654	1370	1040
60°	2386	874	815
65°	997	653	653
70°	340	467	512
75°	281	336	395
80°	169	250	338
85°	162	162	337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5659 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	7.2
10°-20°	193.5	18.7
20°-30°	248.2	24.0
30°-40°	232.9	22.5
40°-50°	162.5	15.7
50°-60°	84.0	8.1
60°-70°	28.7	2.8
70°-80°	8.2	0.8
80°-90°	1.7	0.2
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°	515.6	49.9
0°-40°	748.5	72.4
0°-60°	995.0	96.3
0°-90°	1033.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	796	794	782	786	783	75
15°	745	726	683	661	652	209
25°	631	591	528	492	477	290
35°	494	434	357	311	292	308
45°	341	279	197	136	110	262
55°	178	134	67	52	51	161
65°	36	31	24	22	24	42
75°	6	6	7	9	9	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	800.7	800.7	800.7	800.7	800.7
2.5°	799.4	800.7	793.2	800.7	801.9
5°	795.7	794.5	782.1	785.8	783.3
7.5°	788.3	784.6	764.7	759.8	759.8
10°	777.1	769.7	739.9	731.3	727.6
12.5°	762.3	752.3	713.9	697.8	691.6
15°	744.9	726.3	682.9	660.6	651.9
17.5°	720.1	695.3	648.2	622.2	608.6
20°	694.1	663.1	611.0	580.1	566.4
22.5°	666.8	629.6	570.1	536.7	521.8
25°	630.9	591.2	528.0	492.1	477.2
27.5°	596.2	554.0	487.1	446.2	431.3
30°	562.7	513.1	442.5	402.8	384.2
32.5°	529.2	473.5	400.3	357.0	339.6
35°	494.5	433.8	357.0	311.1	292.5
37.5°	457.4	395.4	316.1	266.5	244.2
40°	418.9	354.5	275.2	219.4	198.3
42.5°	380.5	317.3	234.3	177.2	152.5
45°	340.8	278.9	197.1	136.3	110.3
47.5°	301.2	240.5	161.1	99.2	83.0
50°	262.8	204.5	125.2	73.1	68.2
52.5°	220.6	169.8	94.2	60.7	59.5
55°	178.5	133.9	66.9	52.1	50.8
57.5°	141.3	104.1	48.3	43.4	42.1
60°	101.6	74.4	37.2	35.9	34.7
62.5°	66.9	50.8	29.7	28.5	28.5
65°	35.9	31.0	23.5	22.3	23.5
67.5°	14.9	17.4	17.4	18.6	18.6
70°	9.9	11.2	13.6	14.9	14.9
72.5°	7.4	8.7	9.9	11.2	11.2
75°	6.2	6.2	7.4	8.7	8.7
77.5°	3.7	5.0	5.0	6.2	7.4
80°	2.5	3.7	3.7	5.0	5.0
82.5°	1.2	2.5	2.5	3.7	3.7
85°	1.2	1.2	1.2	1.2	2.5
87.5°	0.0	0.0	0.0	0.0	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)