

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: P1059161

Luminaire Tested: S123RDR-S1165D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

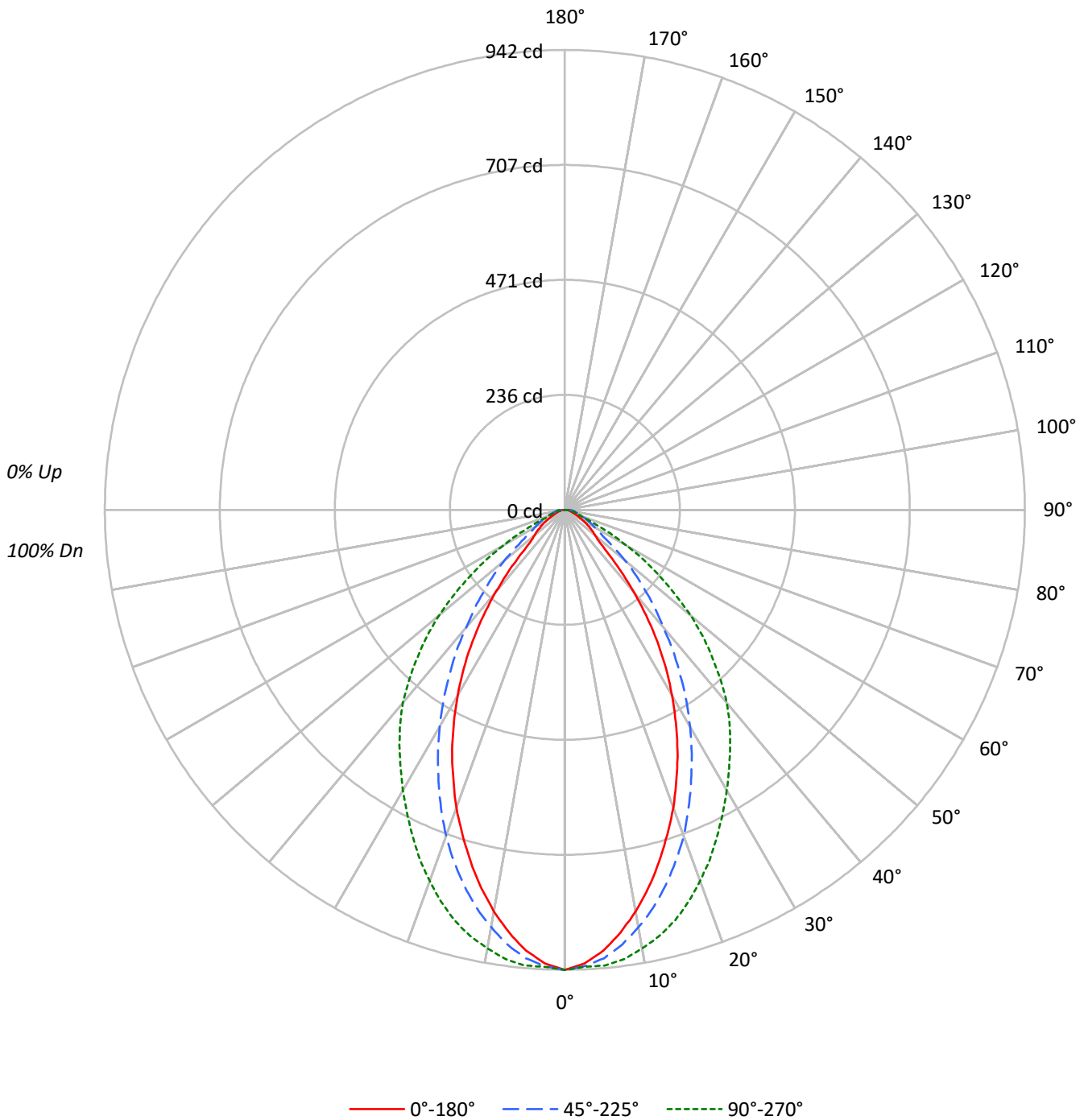
Lumens per Lamp: N/A
Luminaire Lumens: 1262.0 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11065	11065	11065
5°	10685	10864	11042
10°	9956	10350	10874
15°	9064	9683	10586
20°	8114	8887	10108
25°	7075	7931	9553
30°	5950	6957	8990
35°	4732	5896	8459
40°	3374	4807	7908
45°	2011	3861	7081
50°	1483	2939	6131
55°	1239	2000	4872
60°	1000	1649	3424
65°	803	1414	1834
70°	663	1229	1133
75°	626	1184	1062
80°	649	1305	1021
85°	930	1859	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7081 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	6.9
10°-20°	224.9	17.8
20°-30°	286.8	22.7
30°-40°	269.8	21.4
40°-50°	193.9	15.4
50°-60°	111.2	8.8
60°-70°	50.8	4.0
70°-80°	25.5	2.0
80°-90°	12.5	1.0
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°	598.2	47.4
0°-40°	868.1	68.8
0°-60°	1173.1	93.0
0°-90°	1262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	906	924	922	928	937	84
15°	746	772	796	839	871	208
25°	546	571	612	678	737	249
35°	330	354	411	505	590	204
45°	121	147	232	342	426	101
55°	60	62	98	180	238	54
65°	29	40	51	56	66	29
75°	14	28	26	23	23	15
85°	7	14	14	12	10	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	942.3	942.3	942.3	942.3	942.3
2.5°	929.9	943.7	935.4	935.4	936.8
5°	906.5	924.4	921.7	928.5	936.8
7.5°	873.5	892.8	898.3	914.8	928.5
10°	835.0	857.0	868.0	894.1	912.0
12.5°	792.3	817.1	835.0	868.0	894.1
15°	745.6	771.7	796.5	839.1	870.8
17.5°	697.4	723.6	755.2	804.7	841.9
20°	649.3	675.4	711.2	763.5	808.9
22.5°	597.0	623.1	661.7	720.8	775.8
25°	546.1	570.9	612.1	678.2	737.3
27.5°	492.5	517.2	562.6	634.2	700.2
30°	438.8	463.6	513.1	590.1	663.0
32.5°	385.2	408.6	462.2	547.5	625.9
35°	330.1	353.5	411.3	504.8	590.1
37.5°	273.7	297.1	364.5	466.3	554.4
40°	220.1	246.2	313.6	427.8	515.9
42.5°	167.8	195.3	272.4	386.5	471.8
45°	121.1	147.2	232.5	342.5	426.4
47.5°	92.2	105.9	196.7	298.5	382.4
50°	81.2	82.5	160.9	258.6	335.6
52.5°	70.2	71.5	125.2	220.1	286.1
55°	60.5	61.9	97.7	180.2	238.0
57.5°	50.9	53.6	79.8	143.1	191.2
60°	42.6	48.1	70.2	108.7	145.8
62.5°	34.4	44.0	60.5	79.8	104.5
65°	28.9	39.9	50.9	56.4	66.0
67.5°	23.4	37.1	42.6	39.9	39.9
70°	19.3	33.0	35.8	33.0	33.0
72.5°	16.5	31.6	30.3	27.5	27.5
75°	13.8	27.5	26.1	23.4	23.4
77.5°	12.4	23.4	22.0	20.6	19.3
80°	9.6	19.3	19.3	17.9	15.1
82.5°	8.3	16.5	16.5	15.1	12.4
85°	6.9	13.8	13.8	12.4	9.6
87.5°	5.5	12.4	12.4	11.0	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)