

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: P1059324

Luminaire Tested: S123RDR-S560D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059324
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

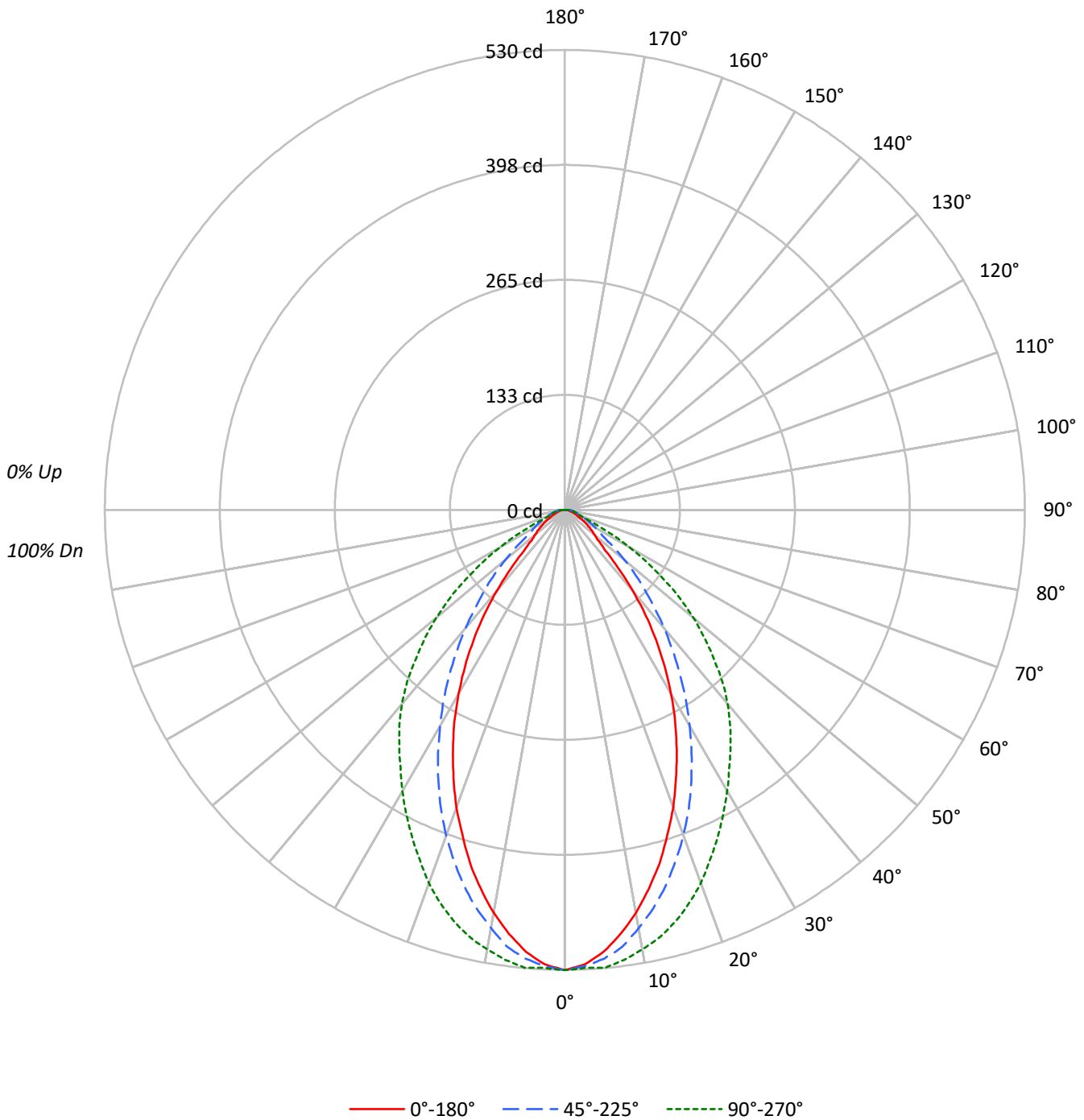
Lumens per Lamp: N/A
Luminaire Lumens: 712.0 lumens
Efficiency: N/A
Efficacy: 36.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

TEST NUMBER: P1059324

CATALOG NUMBER: S123RDR-S560D950-X4F0-XX-UDD-SVL-W

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89	
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			79	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64			64	
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58			58	
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52			52	
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48			48	
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			44	
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40			40	
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6228	6228	6228
5°	6027	6120	6244
10°	5624	5837	6135
15°	5126	5455	5975
20°	4561	4990	5722
25°	3952	4465	5395
30°	3314	3895	5074
35°	2626	3316	4769
40°	1858	2727	4474
45°	1094	2155	4027
50°	818	1637	3526
55°	688	1106	2833
60°	557	944	2010
65°	439	806	1061
70°	385	700	656
75°	358	658	626
80°	358	710	622
85°	445	1064	795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4027 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	6.9
10°-20°	126.9	17.8
20°-30°	161.6	22.7
30°-40°	152.0	21.3
40°-50°	109.5	15.4
50°-60°	63.2	8.9
60°-70°	28.9	4.1
70°-80°	14.4	2.0
80°-90°	6.8	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°	337.2	47.4
0°-40°	489.2	68.7
0°-60°	661.8	93.0
0°-90°	712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	511	520	519	524	530	48
15°	422	437	449	474	492	118
25°	305	321	345	383	416	140
35°	183	199	231	285	333	114
45°	66	82	130	195	242	56
55°	34	35	54	103	138	30
65°	16	22	29	32	38	16
75°	8	15	14	14	14	8
85°	3	7	8	7	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	530.4	530.4	530.4	530.4	530.4
2.5°	524.4	531.0	526.4	527.1	528.4
5°	511.3	519.8	519.2	524.4	529.7
7.5°	492.8	502.7	508.0	515.9	523.1
10°	471.7	482.9	489.5	504.0	514.5
12.5°	447.3	461.8	470.4	489.5	504.7
15°	421.7	436.8	448.7	473.7	491.5
17.5°	392.7	409.1	424.3	453.9	475.7
20°	365.0	380.8	399.3	431.5	457.9
22.5°	334.7	351.8	372.9	407.2	436.8
25°	305.0	320.9	344.6	382.8	416.4
27.5°	275.4	291.2	316.2	358.4	395.3
30°	244.4	260.9	287.3	334.0	374.2
32.5°	214.1	229.9	259.6	310.3	352.5
35°	183.2	199.0	231.3	284.6	332.7
37.5°	152.8	169.3	203.6	263.5	312.9
40°	121.2	139.0	177.9	241.8	291.9
42.5°	91.6	110.7	152.2	219.4	268.8
45°	65.9	82.4	129.8	195.0	242.5
47.5°	51.4	60.0	109.4	170.0	218.1
50°	44.8	46.1	89.6	146.9	193.0
52.5°	38.9	40.2	70.5	125.2	166.7
55°	33.6	34.9	54.0	102.8	138.4
57.5°	28.3	30.3	44.8	81.7	111.3
60°	23.7	26.4	40.2	62.6	85.6
62.5°	19.1	23.7	34.3	46.1	61.3
65°	15.8	22.4	29.0	32.3	38.2
67.5°	13.2	20.4	24.4	23.1	22.4
70°	11.2	18.4	20.4	18.4	19.1
72.5°	9.2	17.1	17.1	15.8	15.8
75°	7.9	15.2	14.5	13.8	13.8
77.5°	6.6	13.2	12.5	11.9	11.2
80°	5.3	10.5	10.5	9.9	9.2
82.5°	4.6	8.6	8.6	8.6	7.2
85°	3.3	7.2	7.9	7.2	5.9
87.5°	2.6	6.6	6.6	5.9	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)