

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059638

Luminaire Tested: S123RDRP-H340D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059638
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: S123RDRP-H340D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

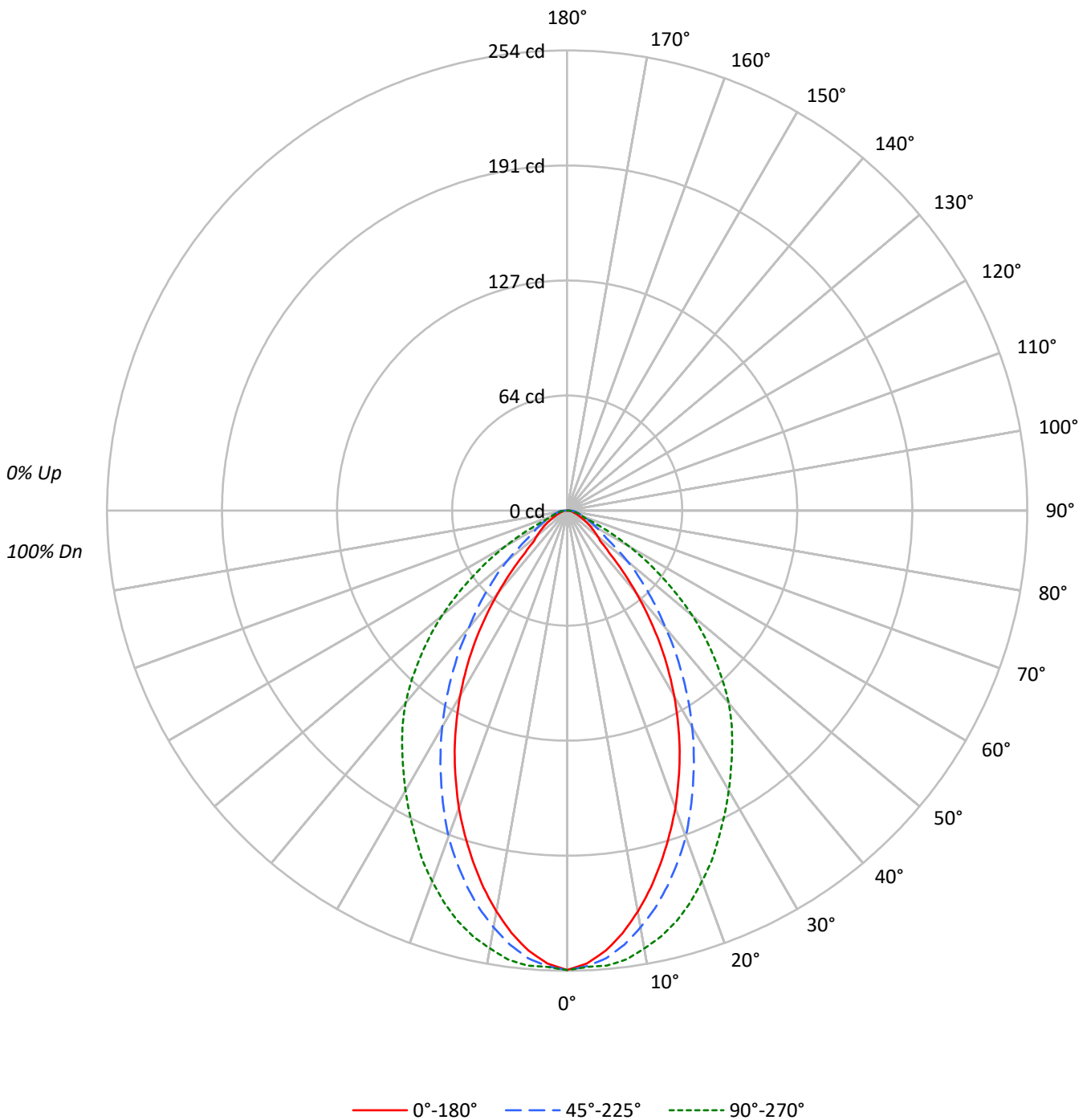
Lumens per Lamp: N/A
Luminaire Lumens: 339.6 lumens
Efficiency: N/A
Efficacy: 29.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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: 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	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	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58				58
6	79	68	61	56	78	67	60	55	66	60	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	56	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	50	43	39	49	43	39	48	43	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2978	2978	2978
5°	2875	2923	2972
10°	2679	2785	2926
15°	2439	2605	2848
20°	2183	2392	2720
25°	1905	2134	2571
30°	1601	1872	2419
35°	1273	1587	2276
40°	907	1294	2128
45°	541	1040	1906
50°	398	791	1650
55°	334	538	1310
60°	270	444	921
65°	217	381	495
70°	179	330	306
75°	168	318	286
80°	176	352	277
85°	256	498	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1906 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	6.9
10°-20°	60.5	17.8
20°-30°	77.2	22.7
30°-40°	72.6	21.4
40°-50°	52.2	15.4
50°-60°	29.9	8.8
60°-70°	13.7	4.0
70°-80°	6.9	2.0
80°-90°	3.3	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°	161.0	47.4
0°-40°	233.6	68.8
0°-60°	315.7	93.0
0°-90°	339.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	339.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	254	254	254	254	254	
5°	244	249	248	250	252	23
15°	201	208	214	226	234	56
25°	147	154	165	182	198	67
35°	89	95	111	136	159	55
45°	33	40	63	92	115	27
55°	16	17	26	48	64	15
65°	8	11	14	15	18	8
75°	4	7	7	6	6	4
85°	2	4	4	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	253.6	253.6	253.6	253.6	253.6
2.5°	250.2	253.9	251.7	251.7	252.1
5°	243.9	248.8	248.0	249.9	252.1
7.5°	235.1	240.2	241.7	246.2	249.9
10°	224.7	230.6	233.6	240.6	245.4
12.5°	213.2	219.9	224.7	233.6	240.6
15°	200.6	207.7	214.3	225.8	234.3
17.5°	187.7	194.7	203.2	216.6	226.5
20°	174.7	181.8	191.4	205.4	217.7
22.5°	160.7	167.7	178.1	194.0	208.8
25°	147.0	153.6	164.7	182.5	198.4
27.5°	132.5	139.2	151.4	170.7	188.4
30°	118.1	124.7	138.1	158.8	178.4
32.5°	103.6	109.9	124.4	147.3	168.4
35°	88.8	95.1	110.7	135.9	158.8
37.5°	73.7	80.0	98.1	125.5	149.2
40°	59.2	66.3	84.4	115.1	138.8
42.5°	45.2	52.6	73.3	104.0	127.0
45°	32.6	39.6	62.6	92.2	114.8
47.5°	24.8	28.5	52.9	80.3	102.9
50°	21.8	22.2	43.3	69.6	90.3
52.5°	18.9	19.2	33.7	59.2	77.0
55°	16.3	16.7	26.3	48.5	64.0
57.5°	13.7	14.4	21.5	38.5	51.5
60°	11.5	13.0	18.9	29.2	39.2
62.5°	9.3	11.8	16.3	21.5	28.1
65°	7.8	10.7	13.7	15.2	17.8
67.5°	6.3	10.0	11.5	10.7	10.7
70°	5.2	8.9	9.6	8.9	8.9
72.5°	4.4	8.5	8.1	7.4	7.4
75°	3.7	7.4	7.0	6.3	6.3
77.5°	3.3	6.3	5.9	5.6	5.2
80°	2.6	5.2	5.2	4.8	4.1
82.5°	2.2	4.4	4.4	4.1	3.3
85°	1.9	3.7	3.7	3.3	2.6
87.5°	1.5	3.3	3.3	3.0	1.9
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	3.76	5.08	4.13	5.39	5.71	11.00	12.32	11.36	12.63	12.95
	3H	5.17	6.34	5.55	6.67	7.04	11.23	12.40	11.61	12.73	13.10
	4H	5.73	6.82	6.13	7.17	7.55	11.34	12.43	11.74	12.78	13.17
	6H	6.19	7.19	6.60	7.56	7.96	11.45	12.45	11.87	12.82	13.22
	8H	6.37	7.32	6.80	7.71	8.12	11.50	12.45	11.93	12.84	13.24
	12H	6.57	7.48	7.00	7.86	8.29	11.55	12.46	11.98	12.84	13.27
4H	2H	4.84	5.93	5.24	6.28	6.67	10.96	12.05	11.36	12.40	12.78
	3H	6.54	7.43	6.95	7.83	8.23	11.33	12.22	11.74	12.62	13.03
	4H	7.37	8.17	7.80	8.59	9.03	11.51	12.31	11.95	12.73	13.17
	6H	8.03	8.72	8.49	9.16	9.63	11.74	12.43	12.20	12.87	13.34
	8H	8.28	8.92	8.75	9.37	9.84	11.84	12.48	12.31	12.93	13.40
	12H	8.54	9.11	9.02	9.59	10.07	11.95	12.52	12.44	13.01	13.48
8H	4H	7.80	8.45	8.27	8.89	9.36	11.56	12.20	12.02	12.65	13.12
	6H	8.76	9.29	9.26	9.78	10.26	11.89	12.42	12.39	12.92	13.40
	8H	9.21	9.69	9.74	10.21	10.70	12.08	12.56	12.60	13.07	13.56
	12H	9.70	10.12	10.21	10.61	11.18	12.31	12.73	12.83	13.23	13.80
12H	4H	7.86	8.43	8.35	8.92	9.39	11.55	12.12	12.04	12.60	13.08
	6H	8.90	9.38	9.42	9.89	10.39	11.92	12.39	12.44	12.91	13.40
	8H	9.49	9.91	10.00	10.40	10.98	12.18	12.60	12.69	13.09	13.67