

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: P1060286

Luminaire Tested: S124RDR-S1020D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060286
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

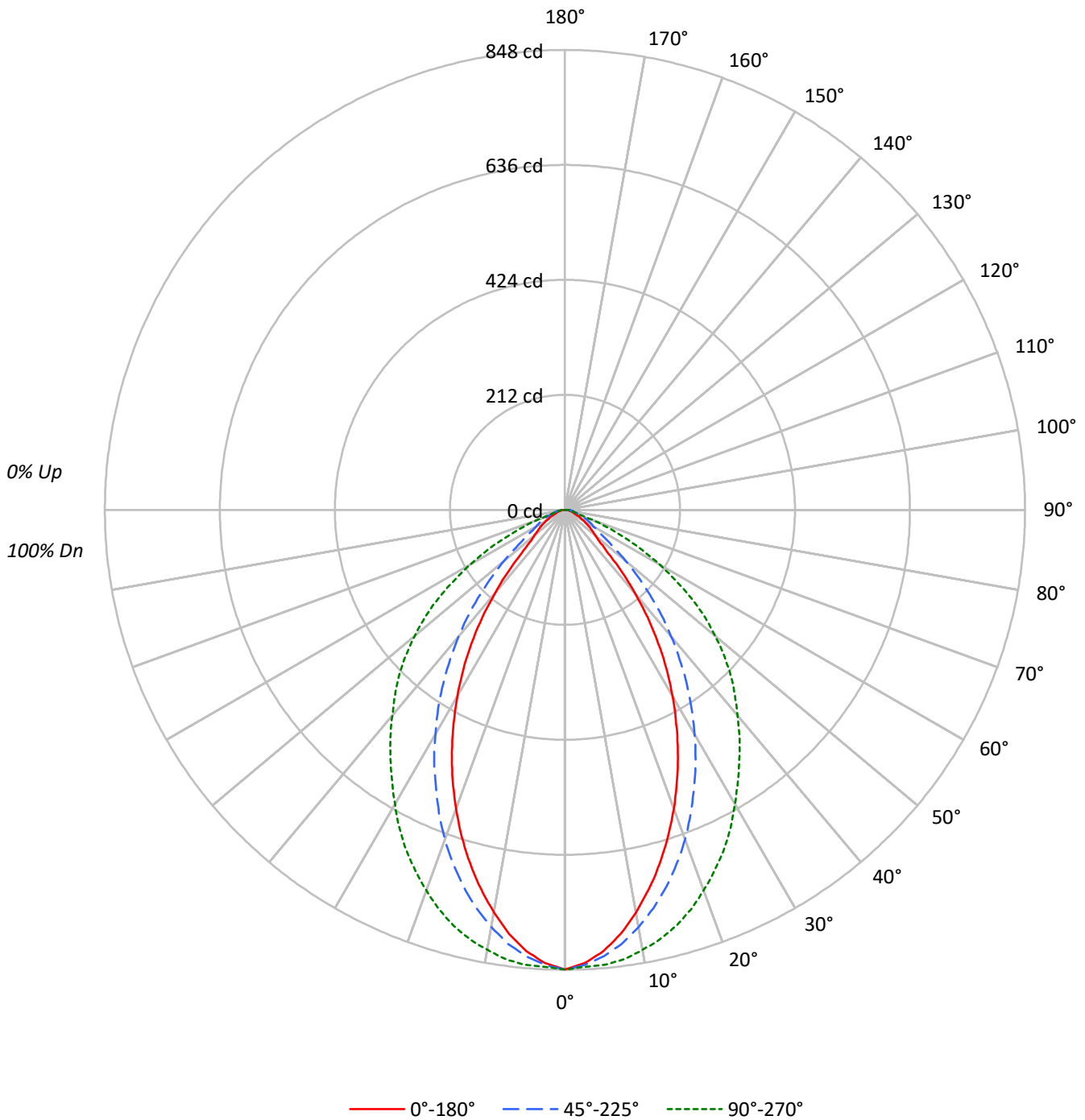
Lumens per Lamp: N/A
Luminaire Lumens: 1191.8 lumens
Efficiency: N/A
Efficacy: 34.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060286

CATALOG NUMBER: S124RDR-S1020D940-X4F0-XX-UDD-SVL-S

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	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7298	7298	7298
5°	7056	7140	7279
10°	6590	6826	7203
15°	6018	6421	7075
20°	5375	5929	6847
25°	4682	5348	6578
30°	3945	4750	6229
35°	3152	4114	5894
40°	2266	3418	5563
45°	1365	2691	5266
50°	982	1951	4839
55°	826	1311	4289
60°	668	1040	3455
65°	528	945	2482
70°	461	788	1329
75°	429	719	645
80°	426	749	590
85°	642	1067	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5266 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	6.5
10°-20°	203.9	17.1
20°-30°	264.5	22.2
30°-40°	254.3	21.3
40°-50°	188.6	15.8
50°-60°	115.6	9.7
60°-70°	56.1	4.7
70°-80°	21.4	1.8
80°-90°	9.6	0.8
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°	546.2	45.8
0°-40°	800.4	67.2
0°-60°	1104.6	92.7
0°-90°	1191.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1191.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	816	828	826	834	842	76
15°	675	694	720	763	794	188
25°	493	518	563	635	692	225
35°	300	327	391	484	561	186
45°	112	140	221	338	432	93
55°	55	57	87	197	286	49
65°	26	28	46	73	122	27
75°	13	20	22	19	19	14
85°	6	11	11	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	847.5	847.5	847.5	847.5	847.5
2.5°	836.7	846.5	840.0	842.1	843.2
5°	816.3	828.1	826.0	833.5	842.1
7.5°	788.2	802.2	806.6	821.7	835.7
10°	753.7	771.0	780.7	805.5	823.8
12.5°	716.0	734.3	752.6	786.1	810.9
15°	675.0	694.4	720.3	763.4	793.6
17.5°	631.9	653.4	684.7	736.5	772.1
20°	586.6	609.2	647.0	704.1	747.2
22.5°	540.2	563.9	606.0	669.6	720.3
25°	492.8	517.6	562.9	635.1	692.3
27.5°	444.3	470.1	521.9	598.4	661.0
30°	396.8	421.6	477.7	560.7	626.5
32.5°	348.3	374.2	434.5	521.9	593.1
35°	299.8	326.7	391.4	484.1	560.7
37.5°	250.2	279.3	347.2	447.5	528.4
40°	201.6	229.7	304.1	409.7	494.9
42.5°	154.2	184.4	263.1	372.0	463.7
45°	112.1	140.2	221.0	337.5	432.4
47.5°	84.1	101.4	182.2	305.2	397.9
50°	73.3	76.6	145.6	269.6	361.2
52.5°	63.6	65.8	113.2	230.8	324.6
55°	55.0	57.1	87.3	197.3	285.7
57.5°	46.4	48.5	70.1	165.0	241.5
60°	38.8	41.0	60.4	131.6	200.6
62.5°	32.3	33.4	53.9	100.3	160.7
65°	25.9	28.0	46.4	73.3	121.8
67.5°	21.6	23.7	37.7	50.7	85.2
70°	18.3	23.7	31.3	35.6	52.8
72.5°	15.1	21.6	25.9	24.8	24.8
75°	12.9	20.5	21.6	19.4	19.4
77.5°	10.8	18.3	17.3	16.2	15.1
80°	8.6	15.1	15.1	12.9	11.9
82.5°	7.5	11.9	11.9	11.9	9.7
85°	6.5	10.8	10.8	9.7	7.5
87.5°	4.3	8.6	9.7	8.6	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)