

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: P1060274

Luminaire Tested: S124RDR-S1020D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060274  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1020D935-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

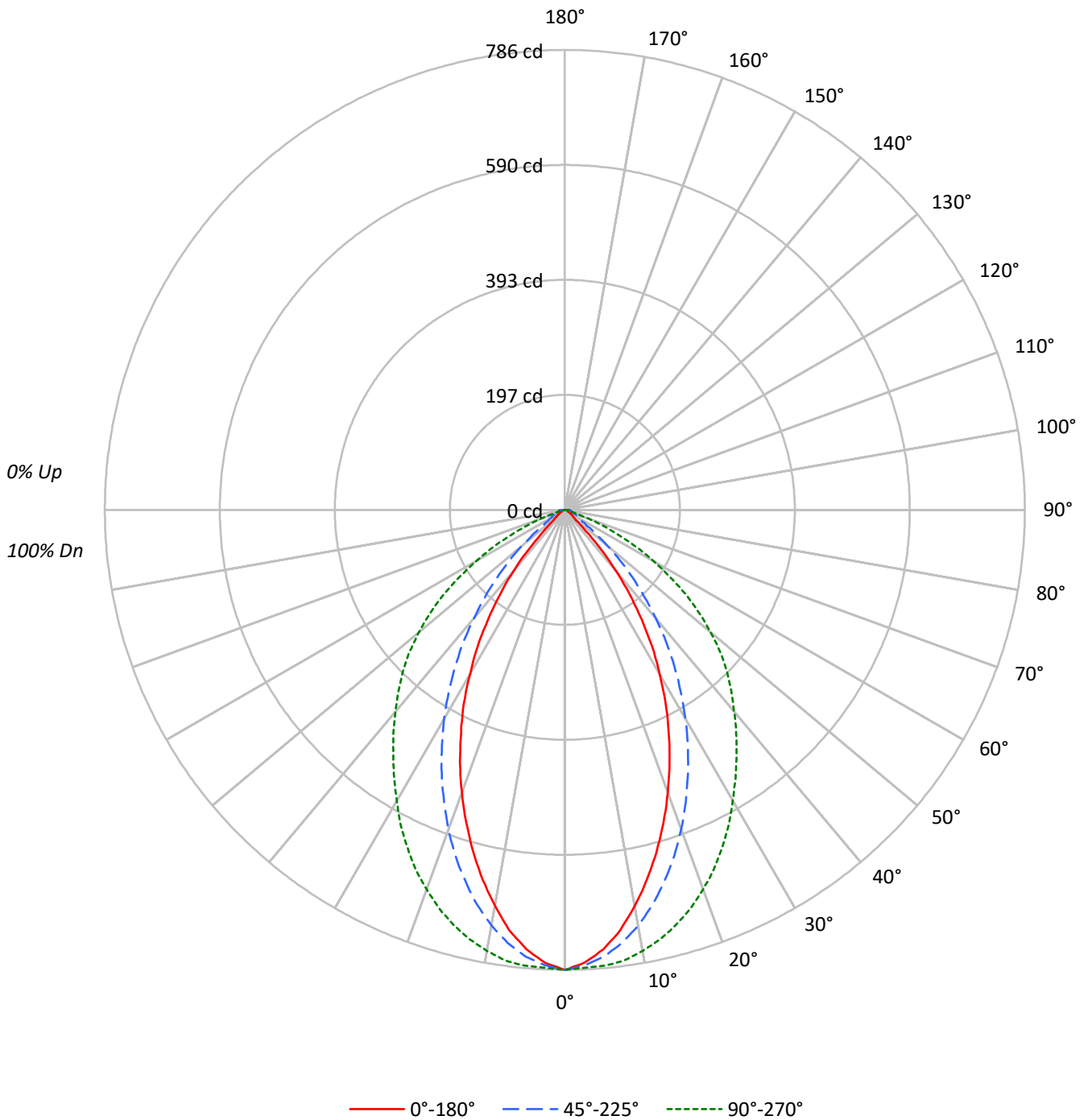
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 986.8 lumens  
Efficiency: N/A  
Efficacy: 28.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
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

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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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6770	6770	6770
5°	6517	6625	6760
10°	6010	6311	6693
15°	5394	5858	6545
20°	4714	5325	6327
25°	3988	4730	6046
30°	3221	4101	5705
35°	2398	3426	5375
40°	1522	2716	5057
45°	609	1991	4769
50°	265	1270	4353
55°	203	656	3800
60°	143	448	3012
65°	106	446	2058
70°	106	393	944
75°	140	416	383
80°	208	466	412
85°	415	820	613

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4769 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	7.3
10°-20°	185.6	18.8
20°-30°	234.5	23.8
30°-40°	215.4	21.8
40°-50°	146.8	14.9
50°-60°	79.6	8.1
60°-70°	33.8	3.4
70°-80°	11.7	1.2
80°-90°	7.4	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°	492.1	49.9
0°-40°	707.4	71.7
0°-60°	933.9	94.6
0°-90°	986.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	986.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	754	765	766	773	782	70
15°	605	625	657	704	734	169
25°	420	447	498	575	636	192
35°	228	258	326	428	511	142
45°	50	80	164	290	392	46
55°	14	15	44	159	253	12
65°	5	6	22	50	101	5
75°	4	12	12	12	12	4
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	786.2	786.2	786.2	786.2	786.2
2.5°	774.8	784.1	778.9	781.0	783.1
5°	753.9	765.4	766.4	772.7	782.1
7.5°	724.8	738.3	746.7	762.3	776.9
10°	687.3	704.0	721.7	746.7	765.4
12.5°	647.7	665.4	691.5	726.9	751.9
15°	605.0	624.8	657.1	704.0	734.2
17.5°	560.3	582.1	620.7	675.8	714.4
20°	514.4	538.4	581.1	643.6	690.4
22.5°	467.6	492.6	539.4	610.2	665.4
25°	419.7	446.7	497.8	574.8	636.3
27.5°	373.8	398.8	455.1	539.4	607.1
30°	323.9	352.0	412.4	503.0	573.8
32.5°	278.0	305.1	368.6	465.5	542.6
35°	228.1	258.3	325.9	428.0	511.3
37.5°	181.2	210.4	284.3	392.6	481.1
40°	135.4	165.6	241.6	357.2	449.9
42.5°	90.6	122.9	201.0	320.7	420.7
45°	50.0	80.2	163.5	289.5	391.6
47.5°	26.0	43.7	128.1	258.3	360.3
50°	19.8	24.0	94.8	223.9	324.9
52.5°	16.7	17.7	64.6	189.5	289.5
55°	13.5	14.6	43.7	159.3	253.1
57.5°	10.4	11.5	31.2	130.2	212.4
60°	8.3	9.4	26.0	100.0	174.9
62.5°	6.2	7.3	25.0	73.9	137.5
65°	5.2	6.2	21.9	50.0	101.0
67.5°	4.2	6.2	18.7	32.3	67.7
70°	4.2	8.3	15.6	20.8	37.5
72.5°	4.2	9.4	13.5	13.5	13.5
75°	4.2	11.5	12.5	11.5	11.5
77.5°	4.2	10.4	10.4	10.4	10.4
80°	4.2	9.4	9.4	9.4	8.3
82.5°	4.2	8.3	9.4	9.4	7.3
85°	4.2	8.3	8.3	8.3	6.2
87.5°	3.1	8.3	8.3	8.3	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)