

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: P1060481

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060481  
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-S575D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

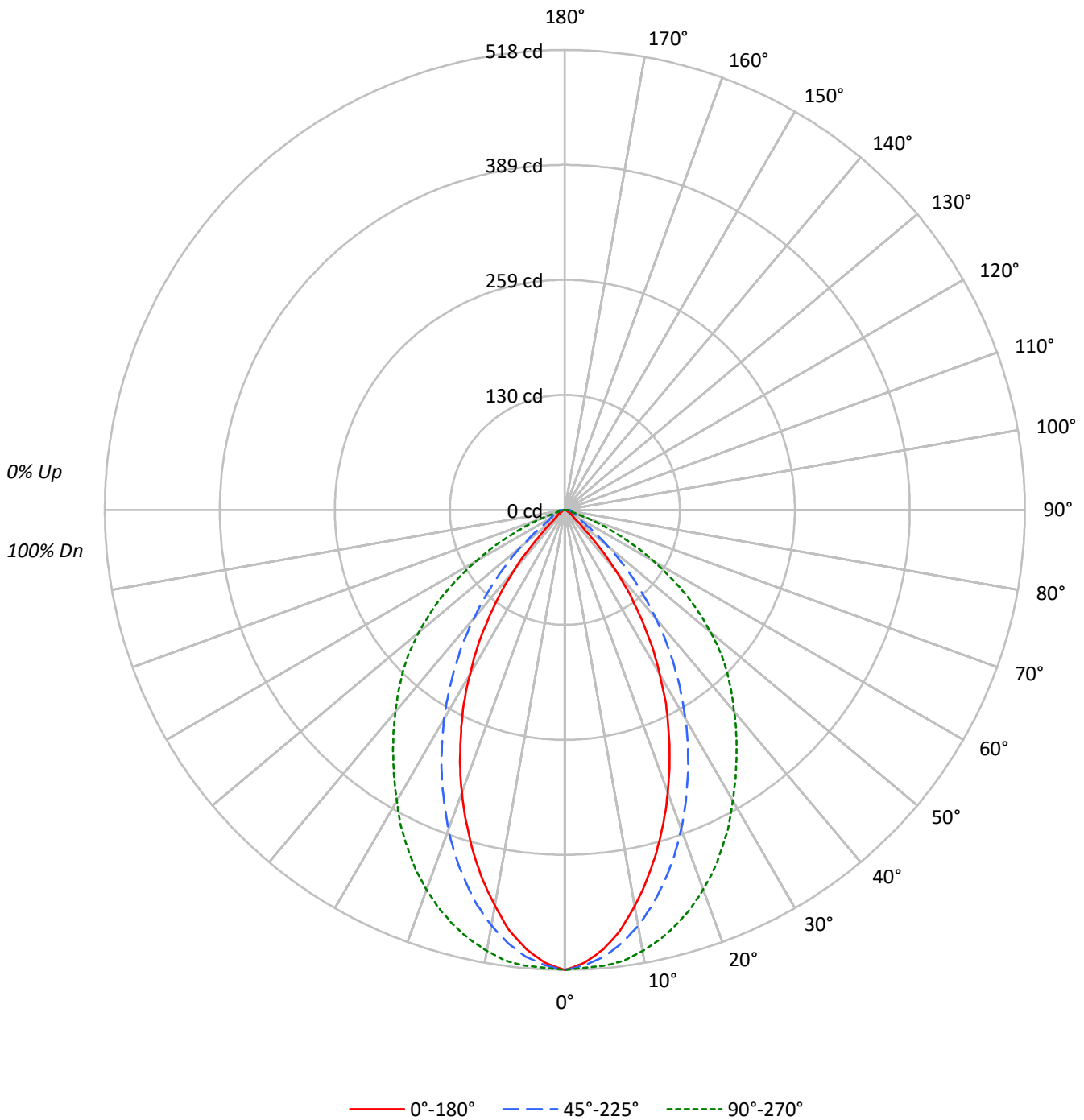
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 650.4 lumens  
Efficiency: N/A  
Efficacy: 33.2 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): 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

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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	102	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°	4462	4462	4462
5°	4295	4367	4456
10°	3961	4160	4411
15°	3555	3861	4314
20°	3107	3510	4170
25°	2628	3117	3985
30°	2123	2703	3761
35°	1580	2258	3543
40°	1003	1790	3333
45°	401	1313	3143
50°	174	837	2868
55°	134	432	2504
60°	95	296	1986
65°	69	293	1357
70°	68	259	622
75°	90	273	253
80°	134	307	273
85°	267	543	405

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3143 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	7.3
10°-20°	122.4	18.8
20°-30°	154.5	23.8
30°-40°	141.9	21.8
40°-50°	96.8	14.9
50°-60°	52.5	8.1
60°-70°	22.3	3.4
70°-80°	7.7	1.2
80°-90°	4.9	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°	324.3	49.9
0°-40°	466.3	71.7
0°-60°	615.5	94.6
0°-90°	650.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	650.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	518	518	518	518	518	
5°	497	504	505	509	516	46
15°	399	412	433	464	484	111
25°	277	294	328	379	419	126
35°	150	170	215	282	337	93
45°	33	53	108	191	258	30
55°	9	10	29	105	167	8
65°	3	4	14	33	67	4
75°	3	8	8	8	8	3
85°	3	6	6	6	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	518.2	518.2	518.2	518.2	518.2
2.5°	510.7	516.8	513.4	514.8	516.2
5°	496.9	504.5	505.2	509.3	515.5
7.5°	477.7	486.6	492.1	502.4	512.0
10°	453.0	464.0	475.7	492.1	504.5
12.5°	426.9	438.6	455.8	479.1	495.6
15°	398.8	411.8	433.1	464.0	483.9
17.5°	369.3	383.7	409.1	445.5	470.9
20°	339.1	354.9	383.0	424.2	455.1
22.5°	308.2	324.7	355.5	402.2	438.6
25°	276.6	294.5	328.1	378.9	419.4
27.5°	246.4	262.9	299.9	355.5	400.2
30°	213.5	232.0	271.8	331.5	378.2
32.5°	183.3	201.1	243.0	306.8	357.6
35°	150.3	170.2	214.8	282.1	337.0
37.5°	119.4	138.6	187.4	258.8	317.1
40°	89.2	109.1	159.2	235.4	296.5
42.5°	59.7	81.0	132.5	211.4	277.3
45°	32.9	52.9	107.8	190.8	258.1
47.5°	17.2	28.8	84.4	170.2	237.5
50°	13.0	15.8	62.5	147.6	214.1
52.5°	11.0	11.7	42.6	124.9	190.8
55°	8.9	9.6	28.8	105.0	166.8
57.5°	6.9	7.6	20.6	85.8	140.0
60°	5.5	6.2	17.2	65.9	115.3
62.5°	4.1	4.8	16.5	48.7	90.6
65°	3.4	4.1	14.4	32.9	66.6
67.5°	2.7	4.1	12.4	21.3	44.6
70°	2.7	5.5	10.3	13.7	24.7
72.5°	2.7	6.2	8.9	8.9	8.9
75°	2.7	7.6	8.2	7.6	7.6
77.5°	2.7	6.9	6.9	6.9	6.9
80°	2.7	6.2	6.2	6.2	5.5
82.5°	2.7	5.5	6.2	6.2	4.8
85°	2.7	5.5	5.5	5.5	4.1
87.5°	2.1	5.5	5.5	5.5	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)