

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: P1060496

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

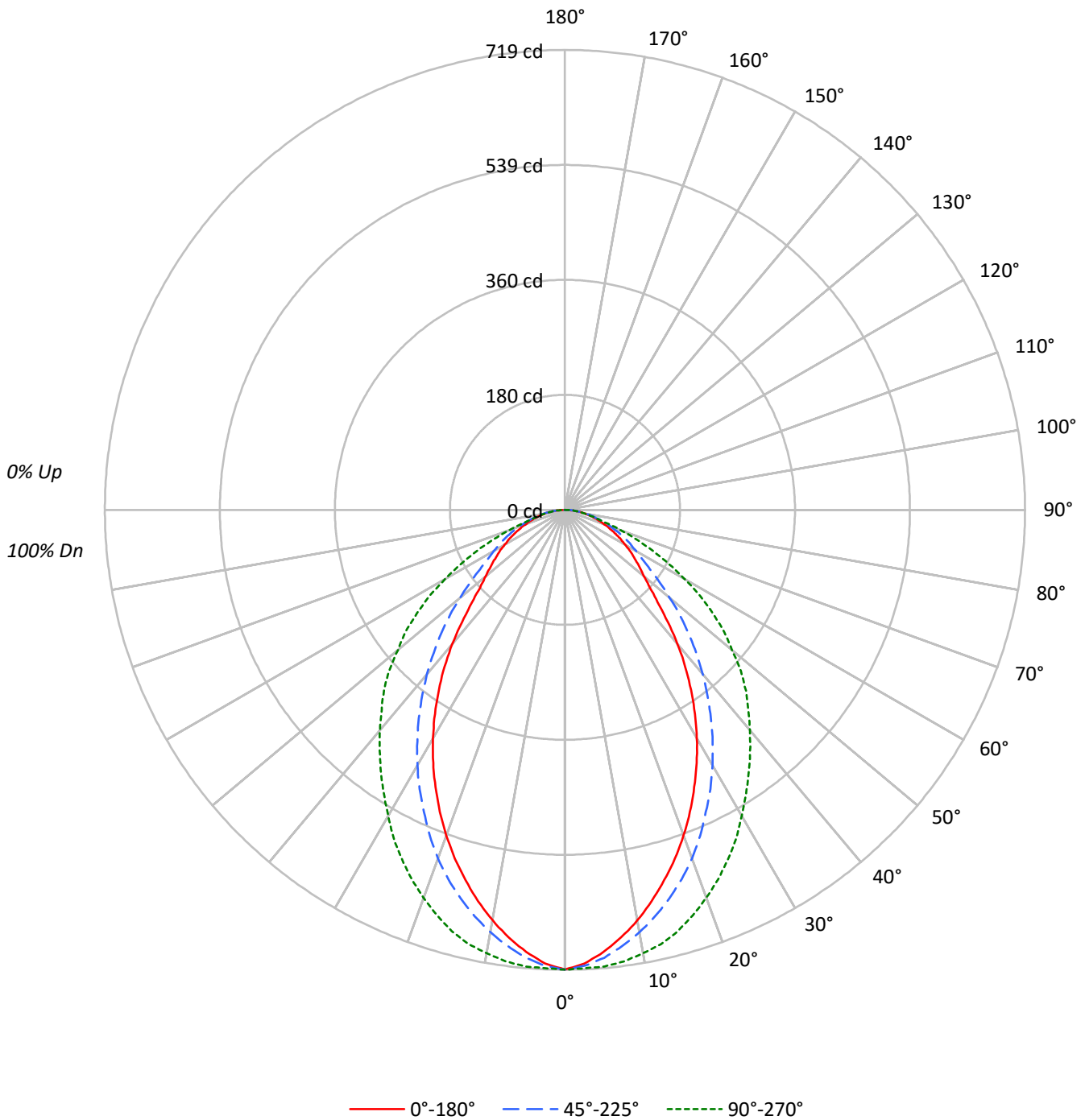
Lumens per Lamp: N/A
Luminaire Lumens: 1308.4 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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										
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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6189	6189	6189
5°	5997	6076	6193
10°	5698	5863	6152
15°	5346	5607	6078
20°	4964	5316	5916
25°	4545	4953	5726
30°	4098	4584	5491
35°	3611	4182	5267
40°	3074	3768	5055
45°	2495	3331	4871
50°	2160	2867	4562
55°	2001	2432	4231
60°	1869	2192	3711
65°	1750	2056	3085
70°	1631	1896	2334
75°	1554	1753	1680
80°	1458	1607	1418
85°	1344	1492	1116

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	5.1
10°-20°	178.3	13.6
20°-30°	243.5	18.6
30°-40°	255.1	19.5
40°-50°	220.8	16.9
50°-60°	166.0	12.7
60°-70°	107.0	8.2
70°-80°	54.9	4.2
80°-90°	16.4	1.3
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°	488.2	37.3
0°-40°	743.4	56.8
0°-60°	1130.2	86.4
0°-90°	1308.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1308.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	694	704	703	708	716	65
15°	600	615	629	658	682	168
25°	478	496	521	562	603	220
35°	344	363	398	450	501	214
45°	205	226	274	340	400	162
55°	133	138	162	231	282	120
65°	86	87	101	122	151	85
75°	47	52	53	52	50	49
85°	14	16	15	14	11	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.7	718.7	718.7	718.7	718.7
2.5°	709.7	718.7	713.4	714.9	717.2
5°	693.8	704.4	702.9	708.1	716.4
7.5°	674.2	685.5	687.8	699.9	711.9
10°	651.6	664.5	670.5	688.6	703.6
12.5°	626.8	640.3	650.9	673.5	695.3
15°	599.7	614.7	629.0	657.7	681.8
17.5°	571.8	586.9	605.7	637.3	664.5
20°	541.7	558.2	580.1	613.2	645.6
22.5°	510.8	528.1	551.5	587.6	625.3
25°	478.4	496.5	521.3	562.0	602.7
27.5°	446.0	464.1	491.9	534.9	579.3
30°	412.1	430.9	461.0	507.8	552.2
32.5°	378.2	398.5	429.4	479.1	526.6
35°	343.5	363.1	397.8	450.5	501.0
37.5°	308.9	329.2	366.1	422.6	475.4
40°	273.5	294.6	335.2	394.8	449.7
42.5°	238.1	260.7	303.6	366.1	424.1
45°	204.9	226.0	273.5	340.5	400.0
47.5°	180.1	194.4	243.3	315.7	372.9
50°	161.2	168.8	214.0	288.5	340.5
52.5°	146.9	152.2	186.8	259.2	314.1
55°	133.3	137.9	162.0	231.3	281.8
57.5°	121.3	123.5	143.1	204.2	250.9
60°	108.5	110.7	127.3	174.8	215.5
62.5°	97.2	98.7	114.5	146.9	183.1
65°	85.9	87.4	100.9	122.0	151.4
67.5°	75.3	77.6	88.1	99.4	120.5
70°	64.8	69.3	75.3	80.6	92.7
72.5°	55.7	60.3	63.3	64.8	65.5
75°	46.7	52.0	52.7	52.0	50.5
77.5°	37.7	42.2	42.2	40.7	39.2
80°	29.4	33.1	32.4	30.9	28.6
82.5°	21.8	24.1	23.4	21.8	19.6
85°	13.6	15.8	15.1	14.3	11.3
87.5°	6.8	9.0	8.3	7.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)