

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: P1060534

Luminaire Tested: S124RDR-S575D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

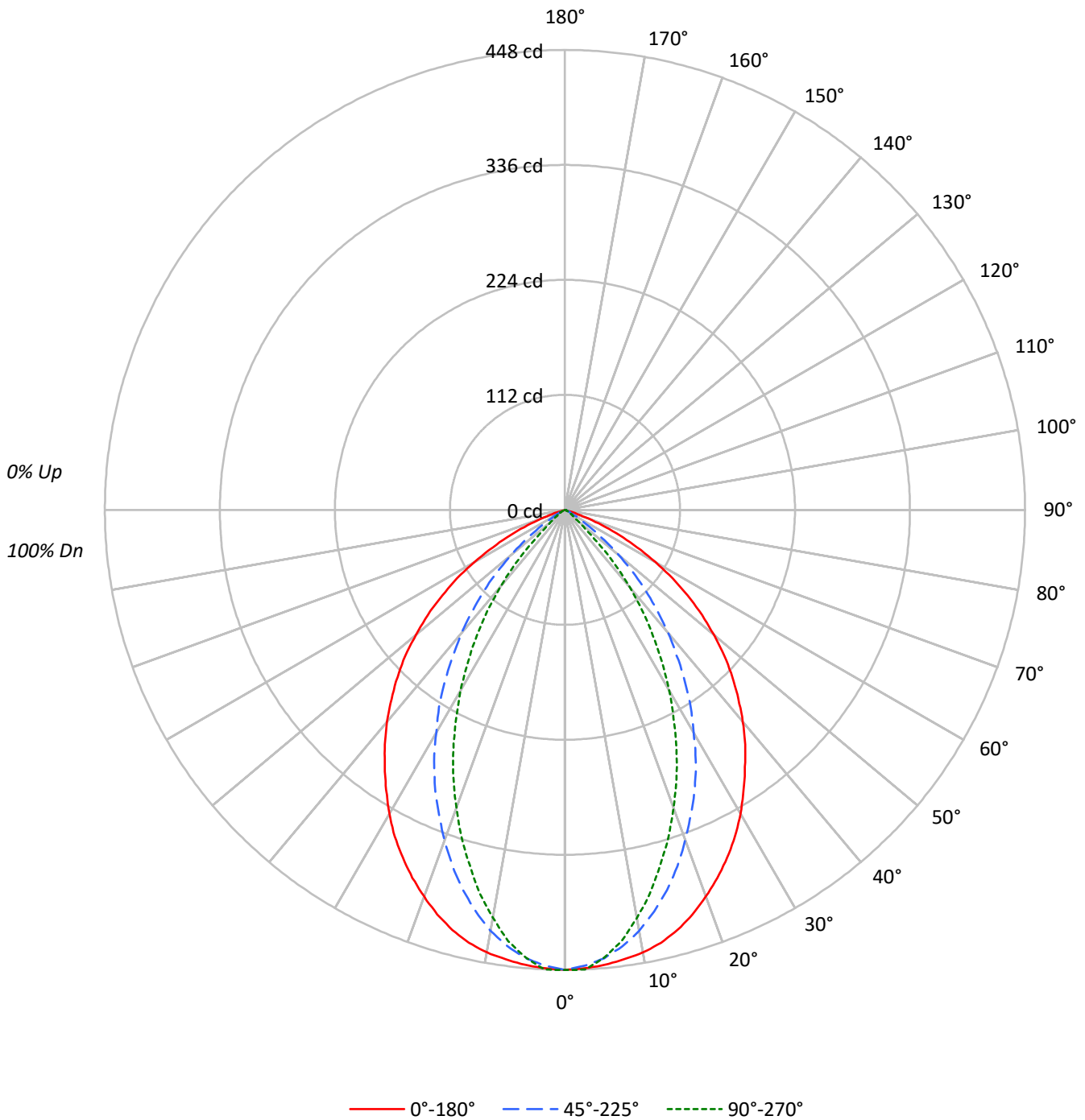
Lumens per Lamp: N/A
Luminaire Lumens: 585.2 lumens
Efficiency: N/A
Efficacy: 29.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3860	3860	3860
5°	3847	3790	3784
10°	3828	3642	3528
15°	3776	3418	3193
20°	3674	3140	2832
25°	3551	2843	2443
30°	3401	2493	2022
35°	3214	2138	1573
40°	3028	1755	1099
45°	2808	1349	544
50°	2533	911	182
55°	2187	467	126
60°	1752	167	90
65°	1200	92	39
70°	539	48	33
75°	0	20	20
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2808 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	7.1
10°-20°	108.5	18.5
20°-30°	140.5	24.0
30°-40°	133.4	22.8
40°-50°	94.5	16.1
50°-60°	48.5	8.3
60°-70°	17.0	2.9
70°-80°	1.5	0.2
80°-90°	0.0	0.0
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°	290.3	49.6
0°-40°	423.8	72.4
0°-60°	566.8	96.9
0°-90°	585.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	585.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	445	446	438	438	438	42
15°	424	411	383	365	358	119
25°	374	345	299	268	257	172
35°	306	261	203	164	150	191
45°	231	178	111	64	45	177
55°	146	96	31	9	8	130
65°	59	28	4	3	2	59
75°	0	1	1	1	1	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	448.2	448.2	448.2	448.2	448.2
2.5°	446.9	448.2	444.3	447.6	448.2
5°	445.0	445.6	438.5	438.5	437.8
7.5°	441.7	440.4	428.8	424.2	423.6
10°	437.8	433.3	416.5	406.8	403.5
12.5°	432.0	423.6	400.9	386.7	382.8
15°	423.6	410.6	383.4	365.3	358.2
17.5°	413.2	396.4	364.0	342.0	334.9
20°	400.9	379.6	342.6	318.0	309.0
22.5°	388.0	363.4	320.6	292.8	283.7
25°	373.7	344.6	299.2	267.5	257.1
27.5°	358.8	324.5	275.9	242.9	229.3
30°	342.0	304.4	250.7	216.3	203.4
32.5°	323.8	282.4	228.0	191.1	175.5
35°	305.7	261.0	203.4	163.9	149.6
37.5°	288.2	240.9	178.8	137.3	123.7
40°	269.4	218.9	156.1	113.3	97.8
42.5°	250.0	197.5	132.8	88.7	71.9
45°	230.6	177.5	110.8	63.5	44.7
47.5°	211.1	156.1	89.4	40.2	24.0
50°	189.1	135.4	68.0	21.4	13.6
52.5°	168.4	115.9	48.6	12.3	10.4
55°	145.7	95.9	31.1	9.1	8.4
57.5°	124.4	76.4	17.5	7.1	6.5
60°	101.7	58.9	9.7	5.8	5.2
62.5°	79.0	42.7	6.5	3.9	3.2
65°	58.9	28.5	4.5	2.6	1.9
67.5°	38.9	16.2	3.2	1.3	1.3
70°	21.4	7.8	1.9	1.3	1.3
72.5°	7.8	2.6	1.3	0.6	0.6
75°	0.0	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)