

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: P1060531

Luminaire Tested: S124RDR-S575D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

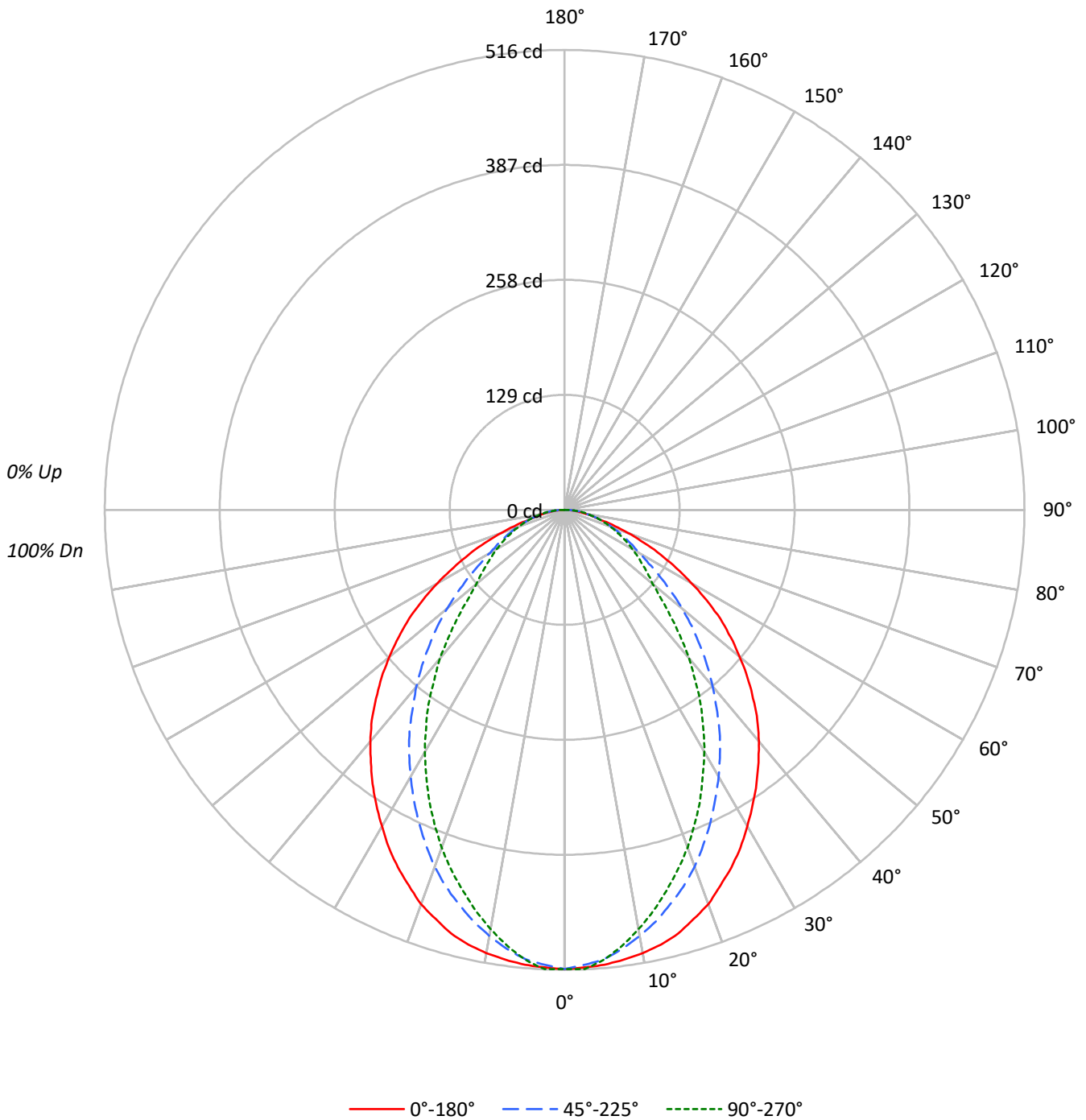
Lumens per Lamp: N/A
Luminaire Lumens: 993.4 lumens
Efficiency: N/A
Efficacy: 50.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060531

CATALOG NUMBER: S124RDR-S575D940-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1060531

CATALOG NUMBER: S124RDR-S575D940-X4F0-XX-UDD-WVL-B

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	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	107	104	100	97	99	97	94	96	93	91	92	90	88	86																												
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74																												
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64																												
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56																												
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																												
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44																												
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																												
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36																												
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33																												
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4436	4436	4436
5°	4427	4375	4380
10°	4415	4245	4177
15°	4388	4086	3939
20°	4316	3906	3695
25°	4205	3676	3417
30°	4076	3437	3118
35°	3946	3188	2800
40°	3811	2906	2443
45°	3642	2610	2042
50°	3439	2303	1728
55°	3199	1955	1600
60°	2837	1659	1512
65°	2419	1530	1430
70°	1891	1417	1357
75°	1288	1311	1311
80°	1111	1230	1260
85°	958	1196	1314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3642 cd/sqm



TEST NUMBER: P1060531

CATALOG NUMBER: S124RDR-S575D940-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	4.8
10°-20°	130.2	13.1
20°-30°	180.7	18.2
30°-40°	193.7	19.5
40°-50°	171.6	17.3
50°-60°	129.3	13.0
60°-70°	83.8	8.4
70°-80°	43.0	4.3
80°-90°	13.2	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°	358.8	36.1
0°-40°	552.6	55.6
0°-60°	853.5	85.9
0°-90°	993.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	993.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	515	515	515	515	515	
5°	512	513	506	507	507	49
15°	492	481	458	447	442	138
25°	443	419	387	366	360	204
35°	375	341	303	276	266	235
45°	299	260	214	181	168	231
55°	213	177	130	110	107	189
65°	119	96	75	71	70	118
75°	39	41	39	39	39	46
85°	10	10	12	13	13	11
90°	0	0	0	0	0	



TEST NUMBER: P1060531

CATALOG NUMBER: S124RDR-S575D940-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	515.2	515.2	515.2	515.2	515.2
2.5°	514.0	515.8	511.0	514.6	515.8
5°	512.2	512.8	506.1	506.7	506.7
7.5°	509.1	507.9	497.0	494.0	493.4
10°	504.9	501.3	485.5	479.5	477.7
12.5°	499.5	492.8	472.8	464.3	460.7
15°	492.2	481.3	458.3	446.8	441.9
17.5°	481.3	467.4	443.2	428.6	423.2
20°	471.0	452.2	426.2	408.0	403.2
22.5°	456.5	436.5	406.8	387.5	381.4
25°	442.6	418.9	386.9	366.3	359.6
27.5°	427.4	400.8	366.3	344.5	336.0
30°	409.9	381.4	345.7	322.7	313.6
32.5°	392.9	362.6	324.5	299.1	289.4
35°	375.4	341.4	303.3	276.1	266.4
37.5°	357.2	321.5	279.7	253.1	240.3
40°	339.0	301.5	258.5	228.2	217.3
42.5°	320.3	280.9	236.7	205.2	191.3
45°	299.1	260.3	214.3	181.0	167.7
47.5°	278.5	240.3	193.7	157.4	145.3
50°	256.7	219.2	171.9	136.8	129.0
52.5°	234.9	197.4	150.7	121.1	117.4
55°	213.1	177.4	130.2	109.6	106.6
57.5°	188.9	156.8	112.0	99.3	96.9
60°	164.7	134.4	96.3	89.6	87.8
62.5°	141.1	115.0	85.4	79.9	78.7
65°	118.7	95.7	75.1	70.8	70.2
67.5°	96.9	78.7	65.4	63.0	61.8
70°	75.1	63.0	56.3	55.1	53.9
72.5°	55.7	50.9	47.8	47.2	46.6
75°	38.7	40.6	39.4	39.4	39.4
77.5°	30.9	31.5	32.1	32.7	32.1
80°	22.4	24.2	24.8	26.0	25.4
82.5°	15.7	17.0	18.8	19.4	20.0
85°	9.7	10.3	12.1	13.3	13.3
87.5°	4.2	4.8	6.1	7.3	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)