

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S124RDRP-S575D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S124RDRP-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

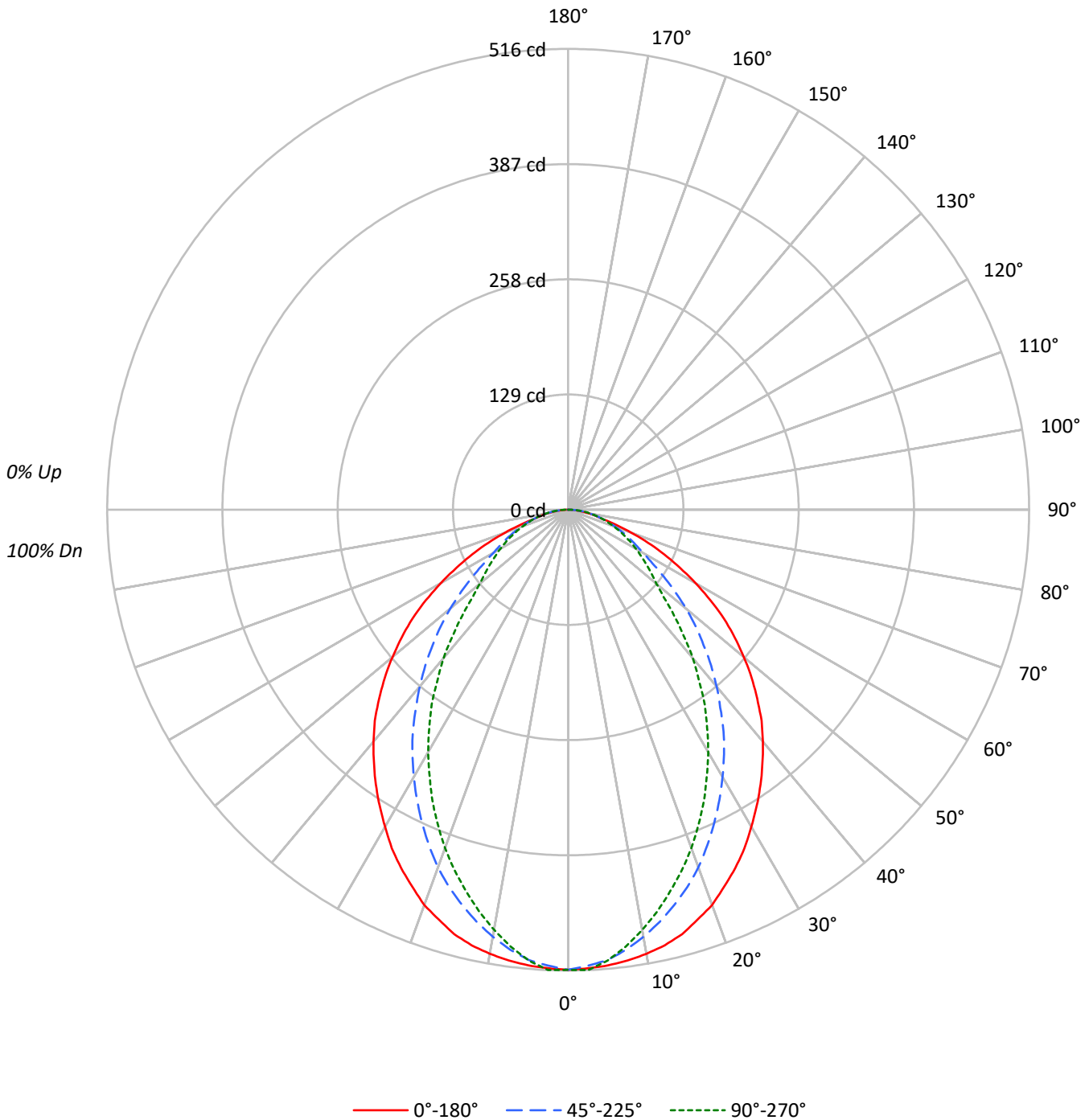
Lumens per Lamp: N/A
Luminaire Lumens: 993.4 lumens
Efficiency: N/A
Efficacy: 50.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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: S124RDRP-S575D940-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot



TEST NUMBER: P1060531

CATALOG NUMBER: S124RDRP-S575D940-X4F0-XX-UDD-WVL-B

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	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: S124RDRP-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: S124RDRP-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



TEST NUMBER: P1060531
 CATALOG NUMBER: S124RDRP-S575D940-X4F0-XX-UDD-WVL-B

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.62	17.11	15.98	17.43	17.74	12.18	13.68	12.55	13.99	14.31
	3H	16.82	18.16	17.20	18.49	18.85	13.88	15.22	14.26	15.55	15.91
	4H	17.13	18.39	17.53	18.74	19.11	14.56	15.82	14.96	16.16	16.54
	6H	17.33	18.49	17.74	18.86	19.25	15.10	16.27	15.52	16.63	17.03
	8H	17.39	18.50	17.81	18.88	19.29	15.32	16.43	15.75	16.82	17.22
	12H	17.42	18.48	17.85	18.86	19.29	15.49	16.55	15.92	16.94	17.37
4H	2H	15.76	17.02	16.16	17.37	17.74	12.84	14.10	13.24	14.45	14.83
	3H	17.16	18.21	17.57	18.61	19.01	14.75	15.80	15.16	16.20	16.60
	4H	17.59	18.53	18.02	18.94	19.38	15.55	16.49	15.99	16.91	17.35
	6H	17.91	18.73	18.37	19.17	19.63	16.24	17.06	16.70	17.50	17.96
	8H	18.01	18.77	18.47	19.22	19.69	16.51	17.28	16.98	17.72	18.19
	12H	18.08	18.76	18.56	19.24	19.71	16.74	17.43	17.23	17.91	18.38
8H	4H	17.71	18.48	18.18	18.92	19.39	15.87	16.64	16.33	17.08	17.55
	6H	18.14	18.77	18.63	19.26	19.74	16.70	17.33	17.20	17.82	18.30
	8H	18.29	18.86	18.81	19.37	19.86	17.06	17.63	17.58	18.14	18.63
	12H	18.42	18.92	18.93	19.42	19.98	17.40	17.90	17.91	18.39	18.96
12H	4H	17.72	18.40	18.20	18.88	19.35	15.90	16.58	16.38	17.06	17.53
	6H	18.16	18.73	18.67	19.24	19.73	16.76	17.33	17.27	17.84	18.33
	8H	18.37	18.87	18.88	19.36	19.93	17.19	17.69	17.70	18.19	18.75