

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: P1060485

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

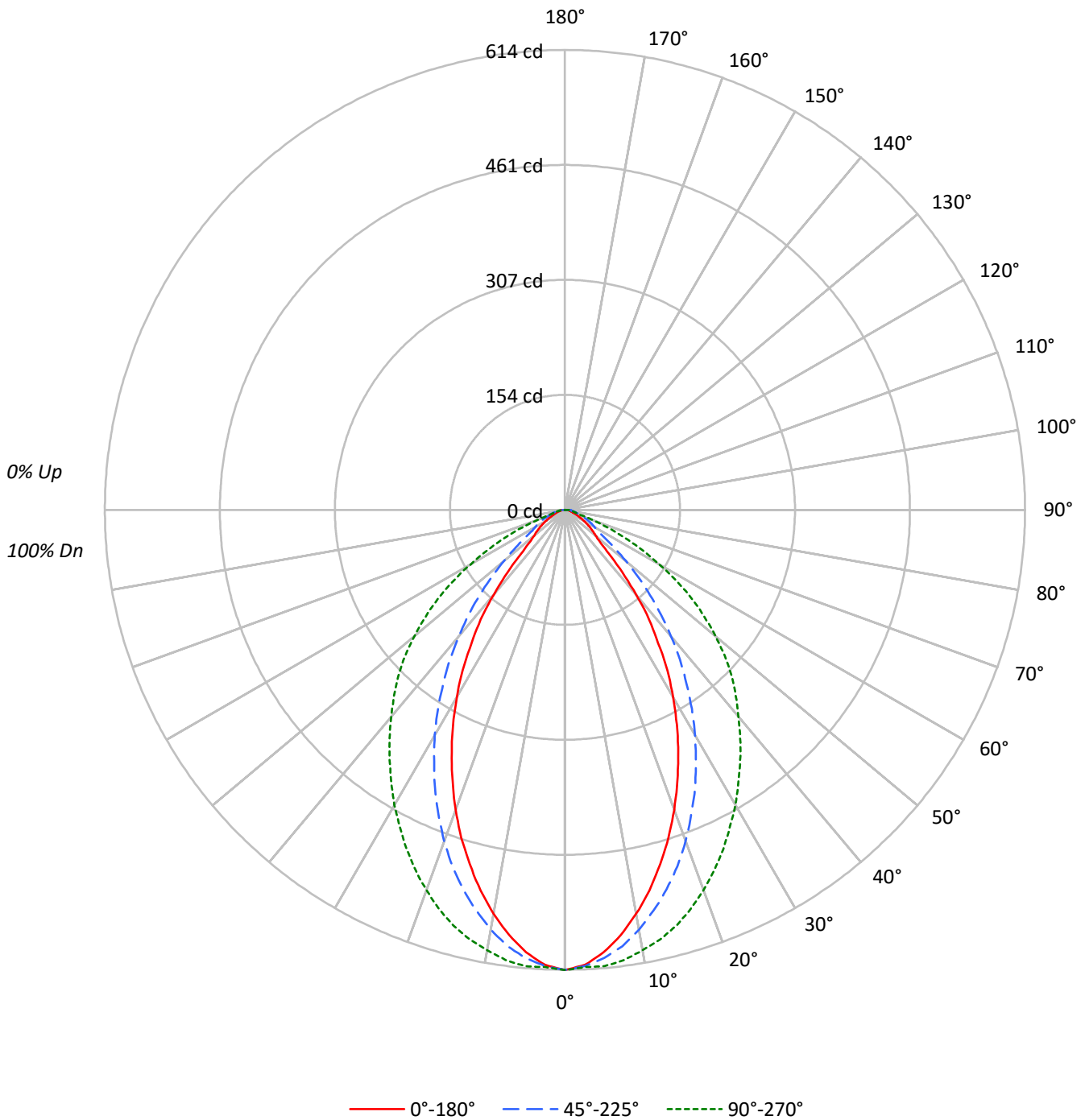
Lumens per Lamp: N/A
Luminaire Lumens: 869.4 lumens
Efficiency: N/A
Efficacy: 44.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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: P1060485

CATALOG NUMBER: S124RDR-S575D840-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060485

CATALOG NUMBER: S124RDR-S575D840-X4F0-XX-UDD-SVL-W

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				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57				57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51				51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43				43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5290	5290	5290
5°	5126	5192	5286
10°	4789	4975	5221
15°	4369	4675	5122
20°	3906	4314	4950
25°	3398	3899	4748
30°	2867	3453	4525
35°	2280	2973	4286
40°	1659	2476	4050
45°	1003	1956	3836
50°	717	1416	3513
55°	608	958	3102
60°	496	780	2506
65°	391	699	1803
70°	327	587	949
75°	296	549	479
80°	307	545	476
85°	405	810	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3836 cd/sqm



TEST NUMBER: P1060485

CATALOG NUMBER: S124RDR-S575D840-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	6.5
10°-20°	148.2	17.0
20°-30°	192.2	22.1
30°-40°	185.0	21.3
40°-50°	137.6	15.8
50°-60°	84.7	9.7
60°-70°	41.6	4.8
70°-80°	16.2	1.9
80°-90°	7.4	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°	396.9	45.7
0°-40°	582.0	66.9
0°-60°	804.3	92.5
0°-90°	869.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	869.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	593	602	601	606	612	55
15°	490	506	524	556	574	137
25°	358	377	410	462	500	164
35°	217	238	283	354	408	136
45°	82	102	161	248	315	68
55°	40	42	64	146	207	36
65°	19	21	34	55	88	20
75°	9	16	16	15	14	10
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



TEST NUMBER: P1060485

CATALOG NUMBER: S124RDR-S575D840-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	614.3	614.3	614.3	614.3	614.3
2.5°	608.1	615.0	609.5	610.2	610.9
5°	593.0	601.9	600.6	606.1	611.5
7.5°	572.4	582.7	587.5	598.5	606.1
10°	547.7	559.4	569.0	586.8	597.1
12.5°	520.3	534.0	547.7	571.7	587.5
15°	490.1	505.8	524.4	556.0	574.5
17.5°	459.2	475.0	499.0	535.4	558.7
20°	426.2	443.4	470.8	511.3	540.2
22.5°	391.9	410.4	440.6	486.6	520.9
25°	357.6	376.8	410.4	461.9	499.7
27.5°	323.3	341.8	378.2	435.8	477.0
30°	288.3	307.5	347.3	407.7	455.1
32.5°	254.6	272.5	315.0	380.9	431.0
35°	216.9	237.5	282.8	353.5	407.7
37.5°	184.6	203.2	251.9	326.0	384.4
40°	147.6	168.2	220.3	299.3	360.3
42.5°	113.2	133.8	190.1	272.5	337.7
45°	82.4	102.3	160.6	247.8	315.0
47.5°	62.5	74.1	131.8	223.8	289.6
50°	53.5	57.0	105.7	197.7	262.2
52.5°	47.4	48.7	82.4	171.6	234.7
55°	40.5	41.9	63.8	145.5	206.6
57.5°	34.3	35.0	51.5	120.8	176.4
60°	28.8	29.5	45.3	96.8	145.5
62.5°	24.0	24.7	40.5	74.8	116.0
65°	19.2	20.6	34.3	54.9	88.5
67.5°	15.8	18.5	28.8	38.4	61.8
70°	13.0	17.8	23.3	26.8	37.7
72.5°	11.0	16.5	19.9	19.2	18.5
75°	8.9	15.8	16.5	15.1	14.4
77.5°	7.5	13.7	13.7	12.4	11.7
80°	6.2	11.0	11.0	11.0	9.6
82.5°	5.5	8.9	9.6	9.6	7.5
85°	4.1	7.5	8.2	8.2	5.5
87.5°	2.7	6.9	7.5	6.9	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)