

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: P1060461

Luminaire Tested: S124RDR-S350D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

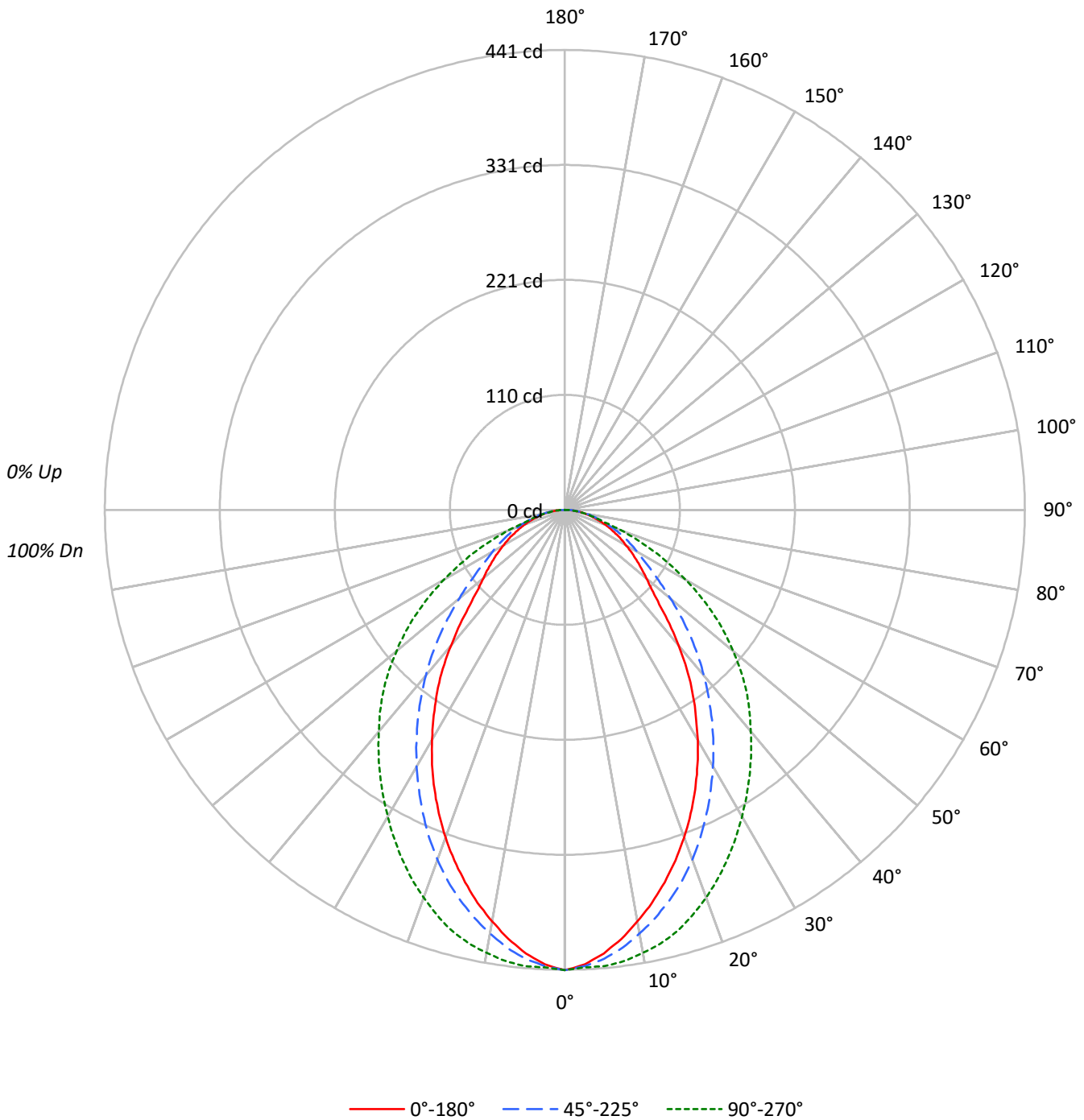
Lumens per Lamp: N/A
Luminaire Lumens: 810.0 lumens
Efficiency: N/A
Efficacy: 64.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1060461

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060461

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-WVL-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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89				87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77				75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67				65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59				57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52				50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42				40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38				37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35				33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3801	3801	3801
5°	3691	3735	3796
10°	3505	3607	3771
15°	3295	3455	3726
20°	3064	3272	3626
25°	2810	3055	3508
30°	2533	2824	3376
35°	2242	2583	3248
40°	1905	2331	3118
45°	1560	2061	2997
50°	1366	1768	2821
55°	1255	1525	2609
60°	1164	1373	2301
65°	1090	1290	1926
70°	1022	1181	1445
75°	962	1078	1051
80°	893	987	893
85°	810	968	771

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2997 cd/sqm



TEST NUMBER: P1060461

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.8	5.0
10°-20°	109.8	13.6
20°-30°	150.0	18.5
30°-40°	157.7	19.5
40°-50°	136.8	16.9
50°-60°	103.2	12.7
60°-70°	66.9	8.3
70°-80°	34.3	4.2
80°-90°	10.4	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°	300.6	37.1
0°-40°	458.3	56.6
0°-60°	698.3	86.2
0°-90°	810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	427	433	432	436	439	40
15°	370	378	388	405	418	104
25°	296	306	322	346	369	136
35°	213	225	246	278	309	133
45°	128	140	169	211	246	101
55°	84	86	102	144	174	75
65°	54	55	63	77	94	53
75°	29	32	32	33	32	31
85°	8	10	10	9	8	9
90°	0	0	0	0	0	



TEST NUMBER: P1060461

CATALOG NUMBER: S124RDR-S350D950-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	441.4	441.4	441.4	441.4	441.4
2.5°	436.4	441.8	437.9	438.7	439.1
5°	427.0	432.8	432.1	435.6	439.1
7.5°	414.9	421.9	423.5	430.5	436.4
10°	400.8	408.6	412.5	423.9	431.3
12.5°	386.0	393.8	400.8	415.3	425.8
15°	369.6	378.5	387.5	405.1	418.0
17.5°	352.4	361.7	373.1	392.2	407.5
20°	334.4	343.8	357.1	377.8	395.7
22.5°	315.3	325.8	339.9	362.1	383.2
25°	295.7	306.3	321.5	346.1	369.2
27.5°	275.4	286.3	302.8	330.1	354.7
30°	254.7	266.4	284.0	312.9	339.5
32.5°	233.6	246.1	264.9	295.7	324.6
35°	213.3	225.0	245.7	278.5	309.0
37.5°	192.2	203.9	226.2	261.7	293.4
40°	169.5	182.4	207.4	244.2	277.4
42.5°	148.4	161.3	188.3	227.4	262.1
45°	128.1	140.2	169.2	211.3	246.1
47.5°	112.5	121.1	150.0	195.7	228.9
50°	102.0	105.9	132.0	178.5	210.6
52.5°	92.6	95.7	115.6	161.3	192.6
55°	83.6	85.9	101.6	144.2	173.8
57.5°	75.8	77.0	89.1	127.0	153.5
60°	67.6	69.1	79.7	109.4	133.6
62.5°	60.9	61.7	71.5	92.6	113.7
65°	53.5	54.7	63.3	76.6	94.5
67.5°	46.9	48.8	54.7	62.5	74.6
70°	40.6	43.4	46.9	50.8	57.4
72.5°	34.8	37.9	39.8	41.4	40.2
75°	28.9	32.4	32.4	32.8	31.6
77.5°	23.4	26.6	26.2	25.8	24.2
80°	18.0	20.7	19.9	19.5	18.0
82.5°	13.3	15.2	14.5	14.1	12.1
85°	8.2	10.2	9.8	9.4	7.8
87.5°	3.9	5.9	5.5	5.1	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)