

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: P1060293

Luminaire Tested: S124RDR-S1020D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060293
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

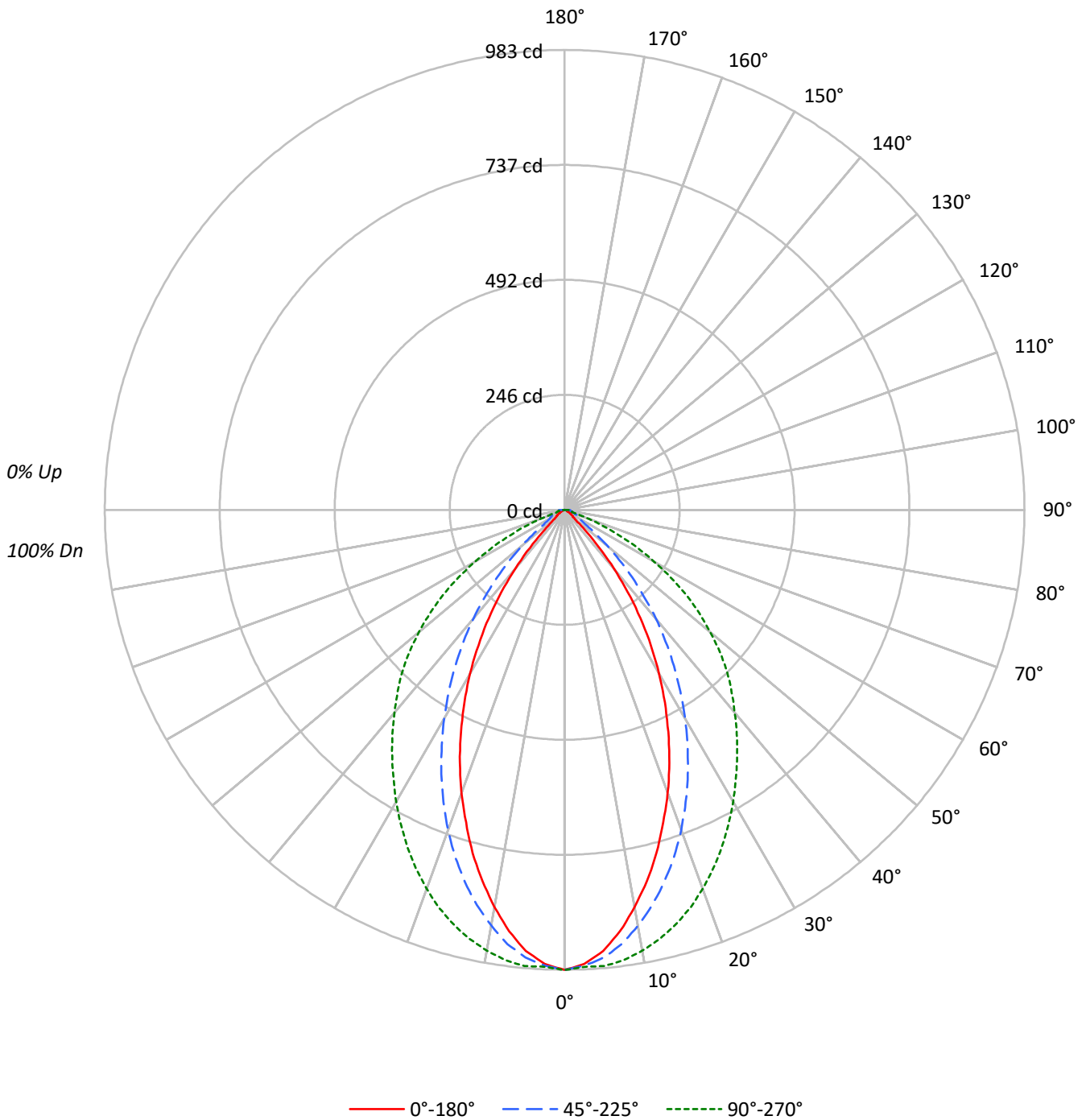
Lumens per Lamp: N/A
Luminaire Lumens: 1239.3 lumens
Efficiency: N/A
Efficacy: 35.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1060293

CATALOG NUMBER: S124RDR-S1020D950-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060293

CATALOG NUMBER: S124RDR-S1020D950-X4F0-XX-UDD-BVL-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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8467	8467	8467
5°	8181	8300	8460
10°	7538	7891	8365
15°	6770	7336	8179
20°	5901	6673	7900
25°	4979	5921	7555
30°	4016	5118	7161
35°	2973	4283	6757
40°	1842	3412	6357
45°	731	2488	5987
50°	324	1562	5442
55°	260	814	4765
60°	179	617	3796
65°	118	611	2610
70°	116	551	1221
75°	153	539	539
80°	228	630	630
85°	454	1255	909

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5987 cd/sqm



TEST NUMBER: P1060293

CATALOG NUMBER: S124RDR-S1020D950-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	7.3
10°-20°	232.8	18.8
20°-30°	293.8	23.7
30°-40°	269.6	21.8
40°-50°	183.6	14.8
50°-60°	100.0	8.1
60°-70°	43.3	3.5
70°-80°	15.8	1.3
80°-90°	10.2	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°	616.8	49.8
0°-40°	886.4	71.5
0°-60°	1170.0	94.4
0°-90°	1239.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1239.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	946	959	960	971	979	88
15°	759	786	823	882	918	211
25°	524	561	623	722	795	239
35°	283	324	407	537	643	175
45°	60	100	204	362	492	56
55°	17	18	54	200	317	15
65°	6	8	30	62	128	7
75°	5	15	16	16	16	5
85°	5	10	13	13	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1060293

CATALOG NUMBER: S124RDR-S1020D950-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.3	983.3	983.3	983.3	983.3
2.5°	971.7	983.3	975.2	977.5	977.5
5°	946.4	959.0	960.2	970.6	978.7
7.5°	908.3	926.7	936.0	956.7	970.6
10°	862.1	884.0	902.5	938.3	956.7
12.5°	812.5	837.9	865.6	912.9	939.4
15°	759.4	785.9	822.9	881.7	917.5
17.5°	700.5	732.8	777.9	848.3	892.1
20°	644.0	676.3	728.2	807.9	862.1
22.5°	585.1	618.6	676.3	765.2	829.8
25°	524.0	560.9	623.2	722.5	795.2
27.5°	463.9	503.2	569.0	677.4	758.2
30°	403.9	443.2	514.7	631.3	720.2
32.5°	342.8	383.2	460.5	582.8	680.9
35°	282.8	324.3	407.4	536.7	642.8
37.5°	221.6	265.4	354.3	491.6	604.7
40°	163.9	207.7	303.5	446.6	565.5
42.5°	109.6	153.5	251.6	402.8	528.6
45°	60.0	100.4	204.3	362.4	491.6
47.5°	32.3	55.4	158.1	323.1	450.1
50°	24.2	30.0	116.6	281.6	406.2
52.5°	20.8	23.1	80.8	237.7	362.4
55°	17.3	18.5	54.2	199.7	317.4
57.5°	13.8	15.0	40.4	161.6	268.9
60°	10.4	12.7	35.8	124.6	220.4
62.5°	8.1	10.4	33.5	91.2	174.3
65°	5.8	8.1	30.0	62.3	128.1
67.5°	5.8	9.2	25.4	40.4	86.6
70°	4.6	12.7	21.9	26.5	48.5
72.5°	4.6	13.8	18.5	18.5	18.5
75°	4.6	15.0	16.2	16.2	16.2
77.5°	4.6	13.8	15.0	13.8	13.8
80°	4.6	12.7	12.7	12.7	12.7
82.5°	4.6	11.5	12.7	12.7	10.4
85°	4.6	10.4	12.7	12.7	9.2
87.5°	3.5	10.4	11.5	11.5	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)