

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: P1060272

Luminaire Tested: S124RDR-S1020D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060272
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-S1020D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

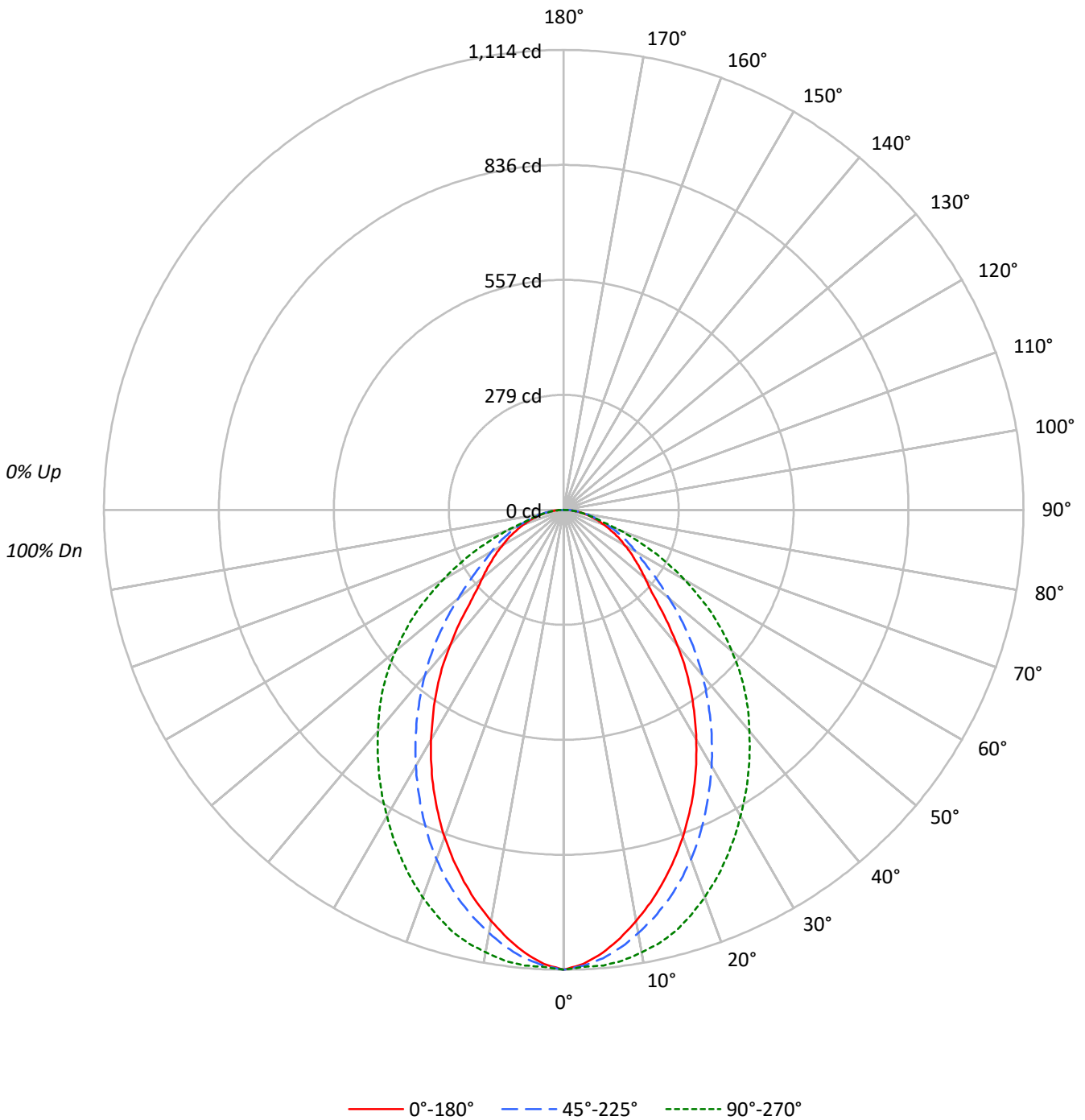
Lumens per Lamp: N/A
Luminaire Lumens: 2043.8 lumens
Efficiency: N/A
Efficacy: 58.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1060272

CATALOG NUMBER: S124RDR-S1020D930-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060272

CATALOG NUMBER: S124RDR-S1020D930-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°	9591	9591	9591
5°	9313	9424	9577
10°	8843	9102	9515
15°	8313	8717	9403
20°	7731	8256	9150
25°	7090	7707	8850
30°	6391	7125	8517
35°	5658	6518	8196
40°	4809	5884	7866
45°	3937	5198	7563
50°	3447	4464	7118
55°	3166	3848	6585
60°	2936	3463	5806
65°	2751	3254	4860
70°	2581	2978	3648
75°	2425	2722	2655
80°	2246	2494	2246
85°	2045	2431	1946

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7563 cd/sqm

TEST NUMBER: P1060272

CATALOG NUMBER: S124RDR-S1020D930-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	5.0
10°-20°	277.0	13.6
20°-30°	378.6	18.5
30°-40°	397.9	19.5
40°-50°	345.3	16.9
50°-60°	260.4	12.7
60°-70°	168.8	8.3
70°-80°	86.6	4.2
80°-90°	26.3	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°	758.5	37.1
0°-40°	1156.3	56.6
0°-60°	1762.1	86.2
0°-90°	2043.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1114	1114	1114	1114	1114	
5°	1077	1092	1090	1099	1108	101
15°	932	955	978	1022	1055	261
25°	746	773	811	873	932	342
35°	538	568	620	703	780	335
45°	323	354	427	533	621	255
55°	211	217	256	364	439	190
65°	135	138	160	193	238	134
75°	73	82	82	83	80	77
85°	21	26	25	24	20	24
90°	0	0	0	0	0	



TEST NUMBER: P1060272

CATALOG NUMBER: S124RDR-S1020D930-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1113.8	1113.8	1113.8	1113.8	1113.8
2.5°	1101.0	1114.8	1105.0	1106.9	1107.9
5°	1077.4	1092.1	1090.2	1099.0	1107.9
7.5°	1046.8	1064.5	1068.5	1086.2	1101.0
10°	1011.3	1031.0	1040.9	1069.5	1088.2
12.5°	973.9	993.6	1011.3	1047.8	1074.4
15°	932.5	955.1	977.8	1022.2	1054.7
17.5°	889.1	912.7	941.3	989.6	1028.1
20°	843.7	867.4	900.9	953.2	998.5
22.5°	795.4	822.1	857.5	913.7	967.0
25°	746.2	772.8	811.2	873.3	931.5
27.5°	694.9	722.5	763.9	832.9	895.0
30°	642.7	672.2	716.6	789.5	856.6
32.5°	589.4	621.0	668.3	746.2	819.1
35°	538.2	567.8	620.0	702.8	779.7
37.5°	485.0	514.5	570.7	660.4	740.2
40°	427.8	460.3	523.4	616.1	699.8
42.5°	374.6	407.1	475.1	573.7	661.4
45°	323.3	353.9	426.8	533.3	621.0
47.5°	283.9	305.6	378.5	493.8	577.6
50°	257.3	267.1	333.2	450.5	531.3
52.5°	233.6	241.5	291.8	407.1	485.9
55°	210.9	216.9	256.3	363.7	438.6
57.5°	191.2	194.2	224.7	320.3	387.4
60°	170.5	174.5	201.1	276.0	337.1
62.5°	153.8	155.7	180.4	233.6	286.8
65°	135.0	138.0	159.7	193.2	238.5
67.5°	118.3	123.2	138.0	157.7	188.3
70°	102.5	109.4	118.3	128.1	144.9
72.5°	87.7	95.6	100.5	104.5	101.5
75°	72.9	81.8	81.8	82.8	79.8
77.5°	59.1	67.0	66.0	65.1	61.1
80°	45.3	52.2	50.3	49.3	45.3
82.5°	33.5	38.4	36.5	35.5	30.6
85°	20.7	25.6	24.6	23.7	19.7
87.5°	9.9	14.8	13.8	12.8	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)