

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: P1060278

Luminaire Tested: S124RDR-S1020D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060278
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-S1020D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

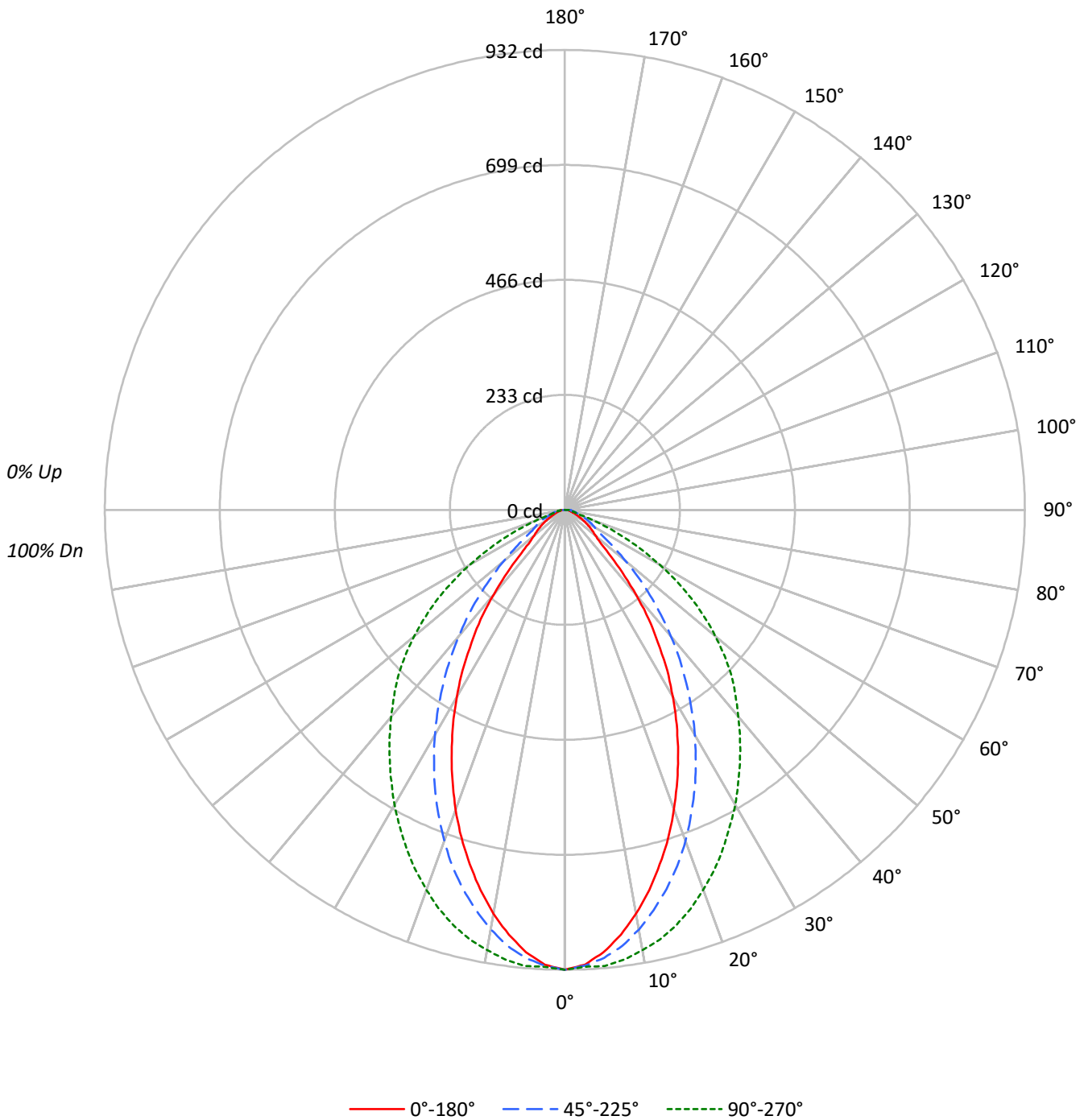
Lumens per Lamp: N/A
Luminaire Lumens: 1319.1 lumens
Efficiency: N/A
Efficacy: 37.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	8026	8026	8026
5°	7777	7876	8020
10°	7266	7549	7922
15°	6628	7093	7770
20°	5926	6547	7510
25°	5154	5916	7203
30°	4349	5239	6865
35°	3460	4510	6503
40°	2517	3758	6145
45°	1522	2968	5821
50°	1088	2149	5329
55°	922	1453	4705
60°	753	1183	3803
65°	595	1062	2736
70°	499	891	1443
75°	449	832	729
80°	466	828	724
85°	613	1235	820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5821 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	6.5
10°-20°	224.9	17.0
20°-30°	291.6	22.1
30°-40°	280.7	21.3
40°-50°	208.8	15.8
50°-60°	128.4	9.7
60°-70°	63.1	4.8
70°-80°	24.6	1.9
80°-90°	11.2	0.9
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°	602.3	45.7
0°-40°	883.0	66.9
0°-60°	1220.2	92.5
0°-90°	1319.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1319.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	900	913	911	920	928	84
15°	744	768	796	844	872	208
25°	542	572	623	701	758	248
35°	329	360	429	536	619	206
45°	125	155	244	376	478	104
55°	61	64	97	221	313	55
65°	29	31	52	83	134	30
75°	14	24	25	23	22	15
85°	6	12	12	12	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	932.0	932.0	932.0	932.0	932.0
2.5°	922.6	933.0	924.7	925.8	926.8
5°	899.7	913.3	911.2	919.5	927.8
7.5°	868.5	884.1	891.4	908.0	919.5
10°	831.0	848.7	863.3	890.3	906.0
12.5°	789.3	810.2	831.0	867.4	891.4
15°	743.5	767.5	795.6	843.5	871.6
17.5°	696.7	720.6	757.1	812.2	847.7
20°	646.7	672.7	714.4	775.8	819.5
22.5°	594.6	622.7	668.5	738.3	790.4
25°	542.5	571.7	622.7	700.8	758.1
27.5°	490.5	518.6	573.8	661.3	723.7
30°	437.4	466.5	526.9	618.6	690.4
32.5°	386.3	413.4	478.0	577.9	654.0
35°	329.1	360.3	429.0	536.3	618.6
37.5°	280.1	308.2	382.2	494.6	583.2
40°	223.9	255.1	334.3	454.0	546.7
42.5°	171.8	203.1	288.5	413.4	512.3
45°	125.0	155.2	243.7	375.9	478.0
47.5°	94.8	112.5	199.9	339.5	439.4
50°	81.2	86.4	160.4	299.9	397.8
52.5°	71.9	73.9	125.0	260.3	356.1
55°	61.4	63.5	96.8	220.8	313.4
57.5°	52.1	53.1	78.1	183.3	267.6
60°	43.7	44.8	68.7	146.8	220.8
62.5°	36.4	37.5	61.4	113.5	176.0
65°	29.2	31.2	52.1	83.3	134.3
67.5°	24.0	28.1	43.7	58.3	93.7
70°	19.8	27.1	35.4	40.6	57.3
72.5°	16.7	25.0	30.2	29.2	28.1
75°	13.5	24.0	25.0	22.9	21.9
77.5°	11.5	20.8	20.8	18.7	17.7
80°	9.4	16.7	16.7	16.7	14.6
82.5°	8.3	13.5	14.6	14.6	11.5
85°	6.2	11.5	12.5	12.5	8.3
87.5°	4.2	10.4	11.5	10.4	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)