

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: P1060277

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
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-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

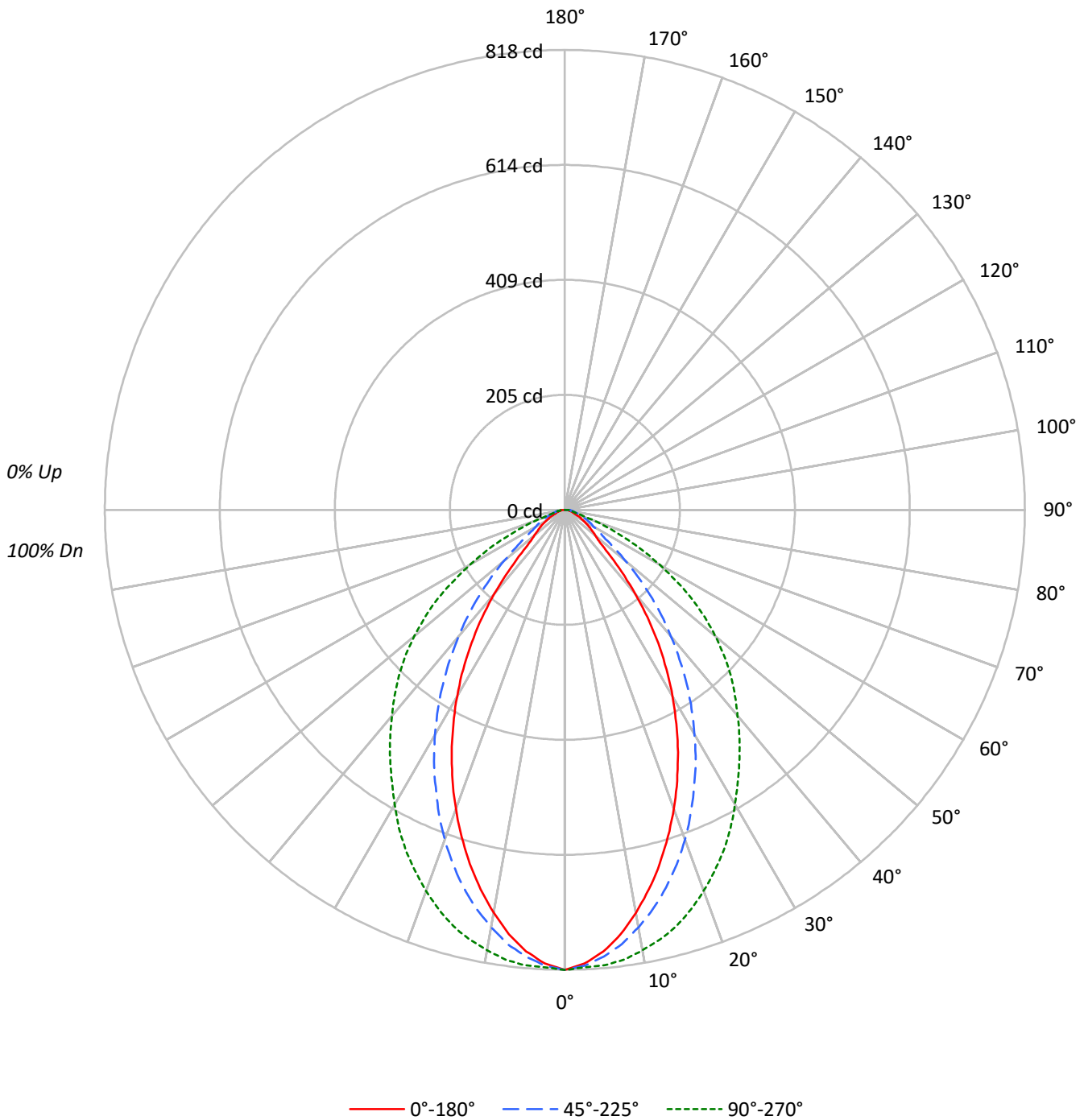
Lumens per Lamp: N/A
Luminaire Lumens: 1150.7 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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					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	105	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	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7046	7046	7046
5°	6812	6894	7028
10°	6364	6591	6955
15°	5811	6200	6831
20°	5190	5725	6612
25°	4521	5164	6351
30°	3809	4586	6015
35°	3042	3973	5691
40°	2189	3300	5372
45°	1319	2599	5084
50°	948	1884	4673
55°	797	1266	4142
60°	646	1004	3336
65°	509	913	2396
70°	446	760	1284
75°	416	692	622
80°	412	724	570
85°	613	1028	721

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5084 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	6.5
10°-20°	196.8	17.1
20°-30°	255.4	22.2
30°-40°	245.5	21.3
40°-50°	182.1	15.8
50°-60°	111.6	9.7
60°-70°	54.2	4.7
70°-80°	20.6	1.8
80°-90°	9.3	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°	527.4	45.8
0°-40°	772.9	67.2
0°-60°	1066.6	92.7
0°-90°	1150.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1150.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	788	800	798	805	813	73
15°	652	670	696	737	766	182
25°	476	500	544	613	668	218
35°	289	316	378	468	541	179
45°	108	135	213	326	418	90
55°	53	55	84	190	276	48
65°	25	27	45	71	118	26
75°	12	20	21	19	19	13
85°	6	10	10	9	7	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.3	818.3	818.3	818.3	818.3
2.5°	807.9	817.3	811.1	813.1	814.2
5°	788.1	799.6	797.5	804.8	813.1
7.5°	761.1	774.6	778.8	793.4	806.9
10°	727.8	744.4	753.8	777.7	795.4
12.5°	691.3	709.0	726.7	759.0	782.9
15°	651.8	670.5	695.5	737.1	766.3
17.5°	610.1	630.9	661.1	711.1	745.5
20°	566.4	588.2	624.7	679.9	721.5
22.5°	521.6	544.5	585.1	646.6	695.5
25°	475.8	499.7	543.5	613.2	668.4
27.5°	429.0	453.9	503.9	577.8	638.2
30°	383.1	407.1	461.2	541.4	604.9
32.5°	336.3	361.3	419.6	503.9	572.6
35°	289.4	315.5	377.9	467.5	541.4
37.5°	241.5	269.7	335.2	432.1	510.2
40°	194.7	221.8	293.6	395.6	477.9
42.5°	148.9	178.0	254.0	359.2	447.7
45°	108.3	135.3	213.4	325.9	417.5
47.5°	81.2	97.9	176.0	294.6	384.2
50°	70.8	73.9	140.6	260.3	348.8
52.5°	61.4	63.5	109.3	222.8	313.4
55°	53.1	55.2	84.3	190.5	275.9
57.5°	44.8	46.9	67.7	159.3	233.2
60°	37.5	39.6	58.3	127.0	193.7
62.5°	31.2	32.3	52.1	96.8	155.1
65°	25.0	27.1	44.8	70.8	117.6
67.5°	20.8	22.9	36.4	48.9	82.3
70°	17.7	22.9	30.2	34.4	51.0
72.5°	14.6	20.8	25.0	23.9	23.9
75°	12.5	19.8	20.8	18.7	18.7
77.5°	10.4	17.7	16.7	15.6	14.6
80°	8.3	14.6	14.6	12.5	11.5
82.5°	7.3	11.5	11.5	11.5	9.4
85°	6.2	10.4	10.4	9.4	7.3
87.5°	4.2	8.3	9.4	8.3	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)