

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: P1060271

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060271
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
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-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

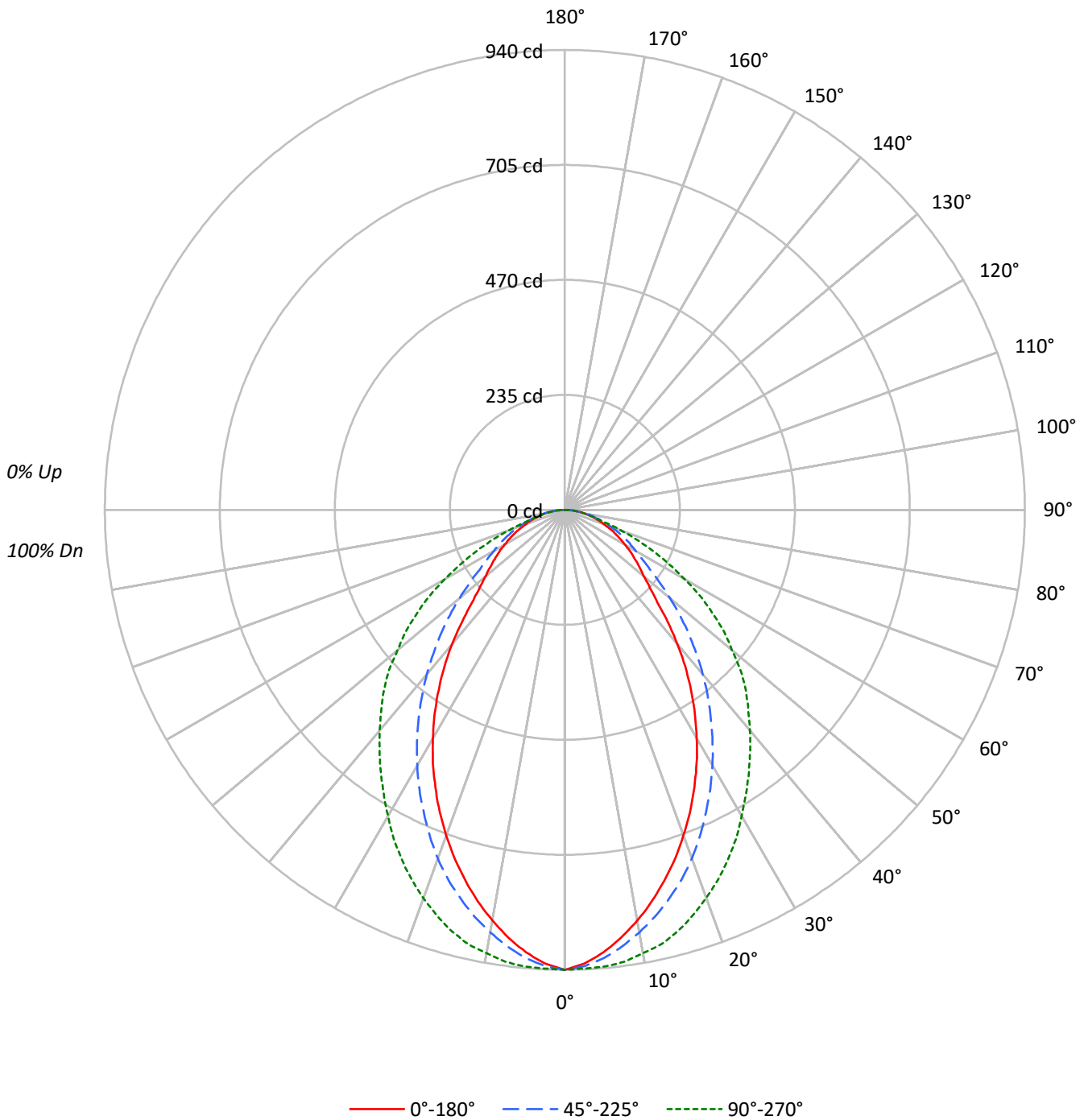
Lumens per Lamp: N/A
Luminaire Lumens: 1711.8 lumens
Efficiency: N/A
Efficacy: 48.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50														
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8096	8096	8096
5°	7846	7948	8102
10°	7454	7669	8049
15°	6994	7336	7951
20°	6493	6954	7740
25°	5946	6480	7491
30°	5360	5998	7183
35°	4724	5471	6890
40°	4022	4930	6614
45°	3265	4357	6373
50°	2825	3750	5968
55°	2618	3181	5534
60°	2444	2869	4855
65°	2290	2692	4036
70°	2135	2482	3051
75°	2033	2296	2196
80°	1904	2103	1860
85°	1749	1946	1462

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6373 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	5.1
10°-20°	233.3	13.6
20°-30°	318.6	18.6
30°-40°	333.8	19.5
40°-50°	288.9	16.9
50°-60°	217.1	12.7
60°-70°	140.0	8.2
70°-80°	71.8	4.2
80°-90°	21.4	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°	638.7	37.3
0°-40°	972.5	56.8
0°-60°	1478.6	86.4
0°-90°	1711.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1711.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	940	940	940	940	940	
5°	908	922	920	926	937	85
15°	784	804	823	860	892	220
25°	626	650	682	735	788	287
35°	449	475	520	589	655	280
45°	268	296	358	446	523	211
55°	174	180	212	303	369	157
65°	112	114	132	160	198	112
75°	61	68	69	68	66	65
85°	18	21	20	19	15	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	940.2	940.2	940.2	940.2	940.2
2.5°	928.4	940.2	933.3	935.3	938.3
5°	907.7	921.5	919.5	926.4	937.3
7.5°	882.1	896.9	899.8	915.6	931.4
10°	852.5	869.3	877.1	900.8	920.5
12.5°	820.0	837.7	851.5	881.1	909.7
15°	784.5	804.2	822.9	860.4	891.9
17.5°	748.0	767.8	792.4	833.8	869.3
20°	708.6	730.3	758.9	802.2	844.6
22.5°	668.2	690.9	721.4	768.7	818.0
25°	625.8	649.5	682.0	735.2	788.4
27.5°	583.5	607.1	643.6	699.7	757.9
30°	539.1	563.7	603.2	664.3	722.4
32.5°	494.8	521.4	561.8	626.8	688.9
35°	449.4	475.0	520.4	589.4	655.4
37.5°	404.1	430.7	479.0	552.9	621.9
40°	357.8	385.4	438.6	516.4	588.4
42.5°	311.4	341.0	397.2	479.0	554.9
45°	268.1	295.7	357.8	445.5	523.3
47.5°	235.5	254.3	318.3	412.9	487.9
50°	210.9	220.8	279.9	377.5	445.5
52.5°	192.2	199.1	244.4	339.0	411.0
55°	174.4	180.4	211.9	302.6	368.6
57.5°	158.7	161.6	187.3	267.1	328.2
60°	141.9	144.9	166.6	228.7	281.9
62.5°	127.1	129.1	149.8	192.2	239.5
65°	112.4	114.3	132.1	159.7	198.1
67.5°	98.6	101.5	115.3	130.1	157.7
70°	84.8	90.7	98.6	105.5	121.2
72.5°	72.9	78.8	82.8	84.8	85.7
75°	61.1	68.0	69.0	68.0	66.0
77.5°	49.3	55.2	55.2	53.2	51.2
80°	38.4	43.4	42.4	40.4	37.5
82.5°	28.6	31.5	30.6	28.6	25.6
85°	17.7	20.7	19.7	18.7	14.8
87.5°	8.9	11.8	10.8	9.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)