

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: P1060280

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060280
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-S1020D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

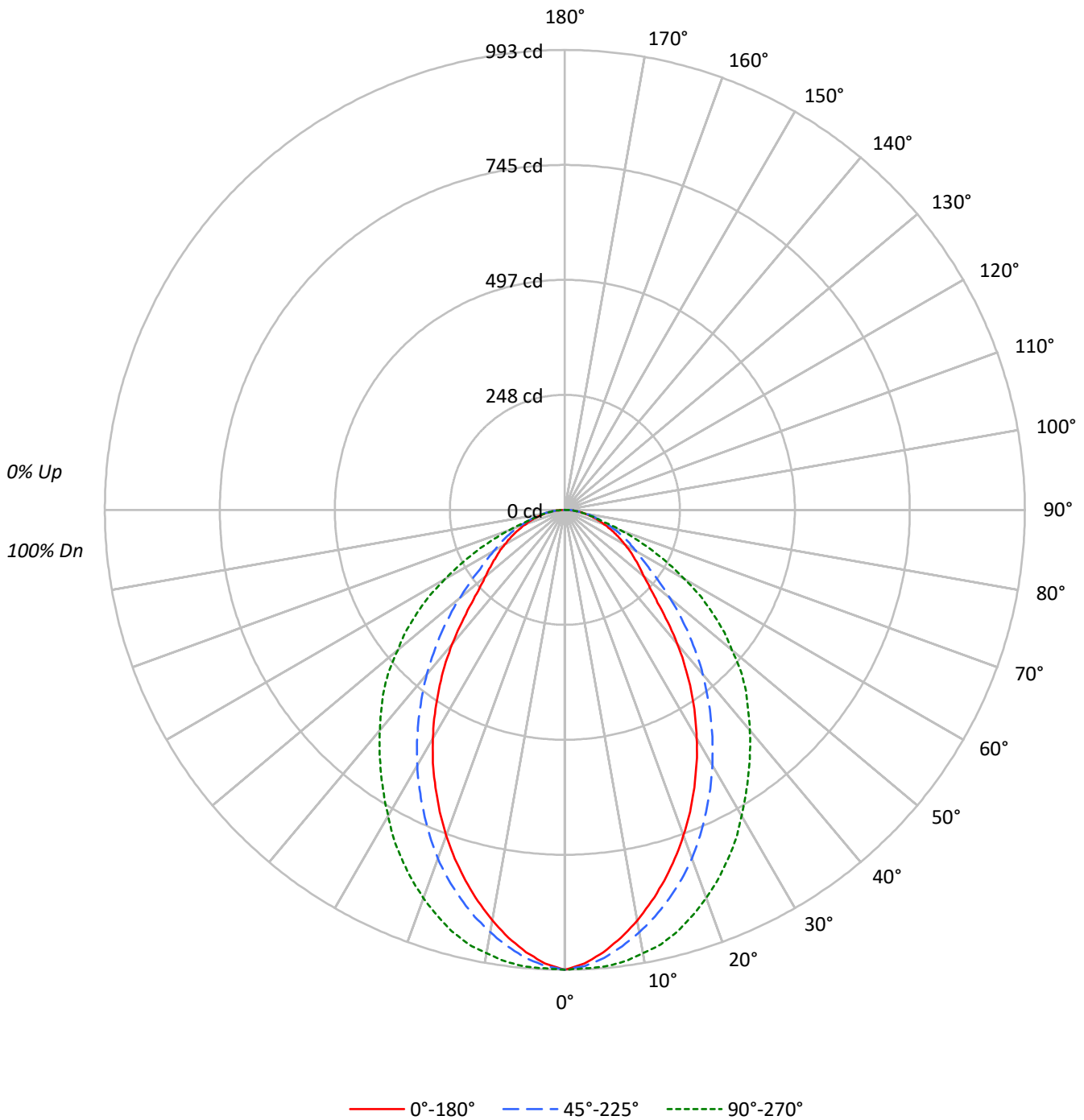
Lumens per Lamp: N/A
Luminaire Lumens: 1807.7 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8550	8550	8550
5°	8286	8394	8556
10°	7872	8100	8500
15°	7386	7748	8397
20°	6857	7344	8174
25°	6279	6843	7911
30°	5661	6334	7586
35°	4989	5776	7276
40°	4247	5207	6985
45°	3448	4601	6731
50°	2983	3960	6302
55°	2765	3360	5845
60°	2582	3029	5127
65°	2419	2842	4263
70°	2253	2621	3223
75°	2146	2425	2319
80°	2013	2222	1964
85°	1848	2055	1541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6731 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	5.1
10°-20°	246.4	13.6
20°-30°	336.5	18.6
30°-40°	352.5	19.5
40°-50°	305.1	16.9
50°-60°	229.3	12.7
60°-70°	147.8	8.2
70°-80°	75.8	4.2
80°-90°	22.6	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°	674.5	37.3
0°-40°	1027.0	56.8
0°-60°	1561.4	86.4
0°-90°	1807.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1807.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	993	993	993	993	993	
5°	959	973	971	978	990	90
15°	828	849	869	909	942	232
25°	661	686	720	776	833	303
35°	475	502	550	622	692	296
45°	283	312	378	470	553	223
55°	184	190	224	320	389	166
65°	119	121	140	169	209	118
75°	64	72	73	72	70	68
85°	19	22	21	20	16	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	992.9	992.9	992.9	992.9	992.9
2.5°	980.4	992.9	985.6	987.7	990.8
5°	958.6	973.2	971.1	978.4	989.8
7.5°	931.5	947.1	950.3	966.9	983.6
10°	900.3	918.0	926.3	951.3	972.1
12.5°	865.9	884.7	899.3	930.5	960.7
15°	828.5	849.3	869.1	908.6	941.9
17.5°	790.0	810.8	836.8	880.5	918.0
20°	748.3	771.2	801.4	847.2	892.0
22.5°	705.7	729.6	761.9	811.8	863.9
25°	660.9	685.9	720.2	776.4	832.6
27.5°	616.2	641.1	679.6	739.0	800.4
30°	569.3	595.3	637.0	701.5	762.9
32.5°	522.5	550.6	593.3	662.0	727.5
35°	474.6	501.7	549.5	622.4	692.1
37.5°	426.7	454.8	505.8	583.9	656.7
40°	377.8	407.0	463.2	545.4	621.4
42.5°	328.9	360.1	419.4	505.8	586.0
45°	283.1	312.2	377.8	470.4	552.7
47.5°	248.8	268.5	336.2	436.1	515.2
50°	222.7	233.1	295.6	398.6	470.4
52.5°	203.0	210.2	258.1	358.0	434.0
55°	184.2	190.5	223.8	319.5	389.3
57.5°	167.6	170.7	197.8	282.1	346.6
60°	149.9	153.0	175.9	241.5	297.7
62.5°	134.3	136.3	158.2	203.0	252.9
65°	118.7	120.7	139.5	168.6	209.2
67.5°	104.1	107.2	121.8	137.4	166.5
70°	89.5	95.8	104.1	111.4	128.0
72.5°	77.0	83.3	87.4	89.5	90.5
75°	64.5	71.8	72.9	71.8	69.7
77.5°	52.0	58.3	58.3	56.2	54.1
80°	40.6	45.8	44.8	42.7	39.6
82.5°	30.2	33.3	32.3	30.2	27.1
85°	18.7	21.9	20.8	19.8	15.6
87.5°	9.4	12.5	11.4	10.4	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)