

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: P1060322

Luminaire Tested: S124RDR-S1195D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060322
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-S1195D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

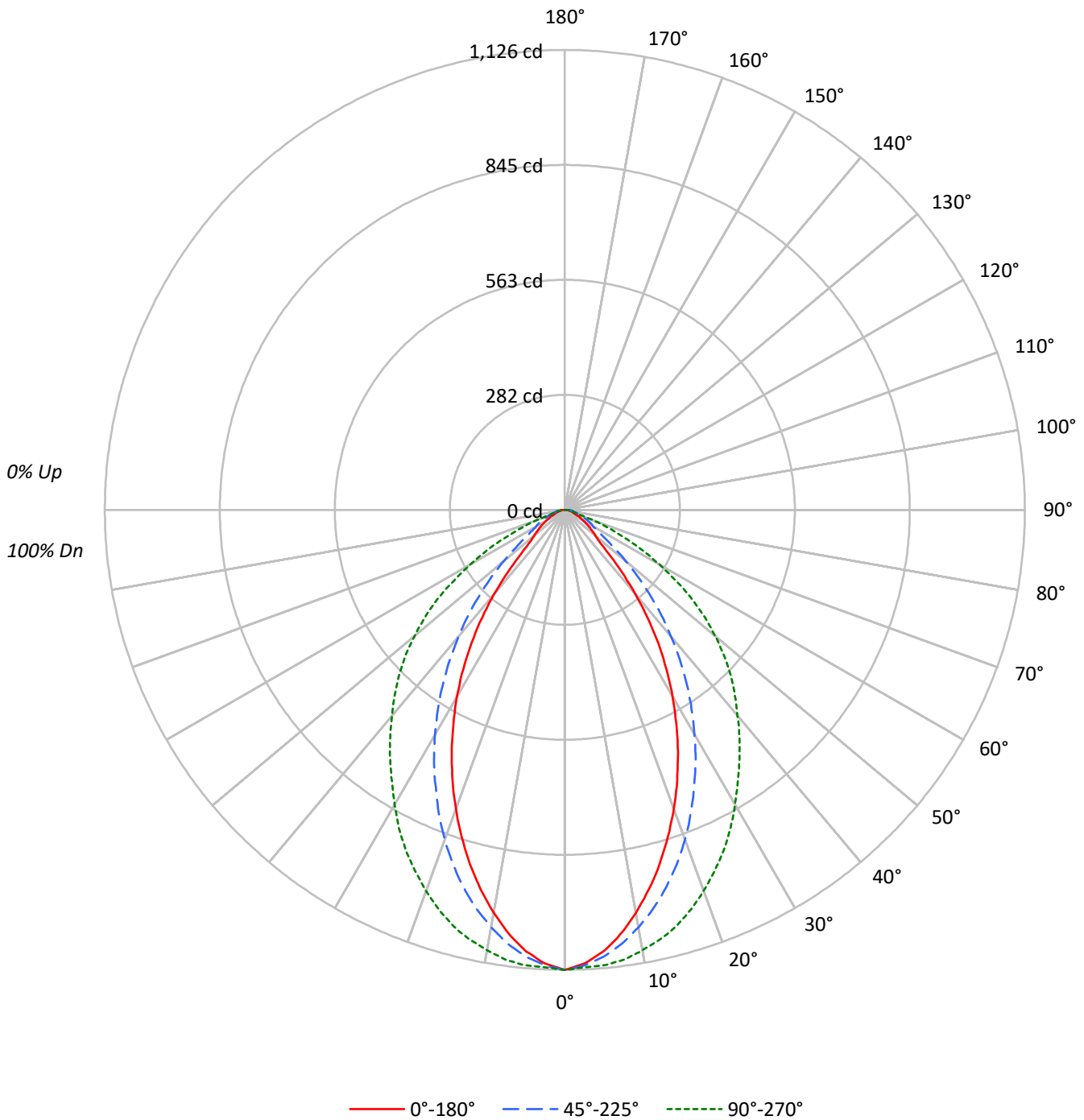
Lumens per Lamp: N/A
Luminaire Lumens: 1584.0 lumens
Efficiency: N/A
Efficacy: 37.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	9700	9700	9700
5°	9378	9489	9675
10°	8760	9073	9574
15°	7998	8534	9403
20°	7144	7880	9101
25°	6223	7108	8742
30°	5244	6313	8280
35°	4188	5468	7834
40°	3013	4543	7394
45°	1815	3578	6999
50°	1306	2592	6432
55°	1097	1743	5702
60°	889	1383	4591
65°	701	1255	3299
70°	614	1047	1767
75°	572	955	858
80°	570	997	784
85°	850	1413	988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6999 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	6.5
10°-20°	270.9	17.1
20°-30°	351.6	22.2
30°-40°	337.9	21.3
40°-50°	250.7	15.8
50°-60°	153.6	9.7
60°-70°	74.6	4.7
70°-80°	28.4	1.8
80°-90°	12.8	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°	725.9	45.8
0°-40°	1063.9	67.2
0°-60°	1468.2	92.7
0°-90°	1584.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1584.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1085	1101	1098	1108	1119	101
15°	897	923	957	1015	1055	250
25°	655	688	748	844	920	299
35°	398	434	520	644	745	247
45°	149	186	294	449	575	124
55°	73	76	116	262	380	66
65°	34	37	62	98	162	36
75°	17	27	29	26	26	18
85°	9	14	14	13	10	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1126.5	1126.5	1126.5	1126.5	1126.5
2.5°	1112.1	1125.0	1116.4	1119.3	1120.7
5°	1084.9	1100.7	1097.8	1107.8	1119.3
7.5°	1047.6	1066.3	1072.0	1092.1	1110.7
10°	1001.8	1024.7	1037.6	1070.6	1094.9
12.5°	951.6	976.0	1000.3	1044.8	1077.7
15°	897.2	923.0	957.3	1014.7	1054.8
17.5°	839.8	868.5	910.1	978.8	1026.1
20°	779.6	809.7	859.9	935.8	993.2
22.5°	718.0	749.5	805.4	890.0	957.3
25°	655.0	687.9	748.1	844.1	920.1
27.5°	590.5	624.9	693.6	795.4	878.5
30°	527.4	560.4	634.9	745.2	832.7
32.5°	462.9	497.3	577.6	693.6	788.2
35°	398.4	434.2	520.2	643.5	745.2
37.5°	332.5	371.2	461.5	594.8	702.2
40°	268.0	305.3	404.1	544.6	657.8
42.5°	204.9	245.1	349.7	494.4	616.3
45°	149.0	186.3	293.8	448.6	574.7
47.5°	111.8	134.7	242.2	405.6	528.8
50°	97.5	101.8	193.5	358.3	480.1
52.5°	84.6	87.4	150.5	306.7	431.4
55°	73.1	76.0	116.1	262.3	379.8
57.5°	61.6	64.5	93.2	219.3	321.0
60°	51.6	54.5	80.3	174.8	266.6
62.5°	43.0	44.4	71.7	133.3	213.5
65°	34.4	37.3	61.6	97.5	161.9
67.5°	28.7	31.5	50.2	67.4	113.2
70°	24.4	31.5	41.6	47.3	70.2
72.5°	20.1	28.7	34.4	33.0	33.0
75°	17.2	27.2	28.7	25.8	25.8
77.5°	14.3	24.4	22.9	21.5	20.1
80°	11.5	20.1	20.1	17.2	15.8
82.5°	10.0	15.8	15.8	15.8	12.9
85°	8.6	14.3	14.3	12.9	10.0
87.5°	5.7	11.5	12.9	11.5	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)