

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: P1060565

Luminaire Tested: S124RDR-S795D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060565
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-S795D840-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

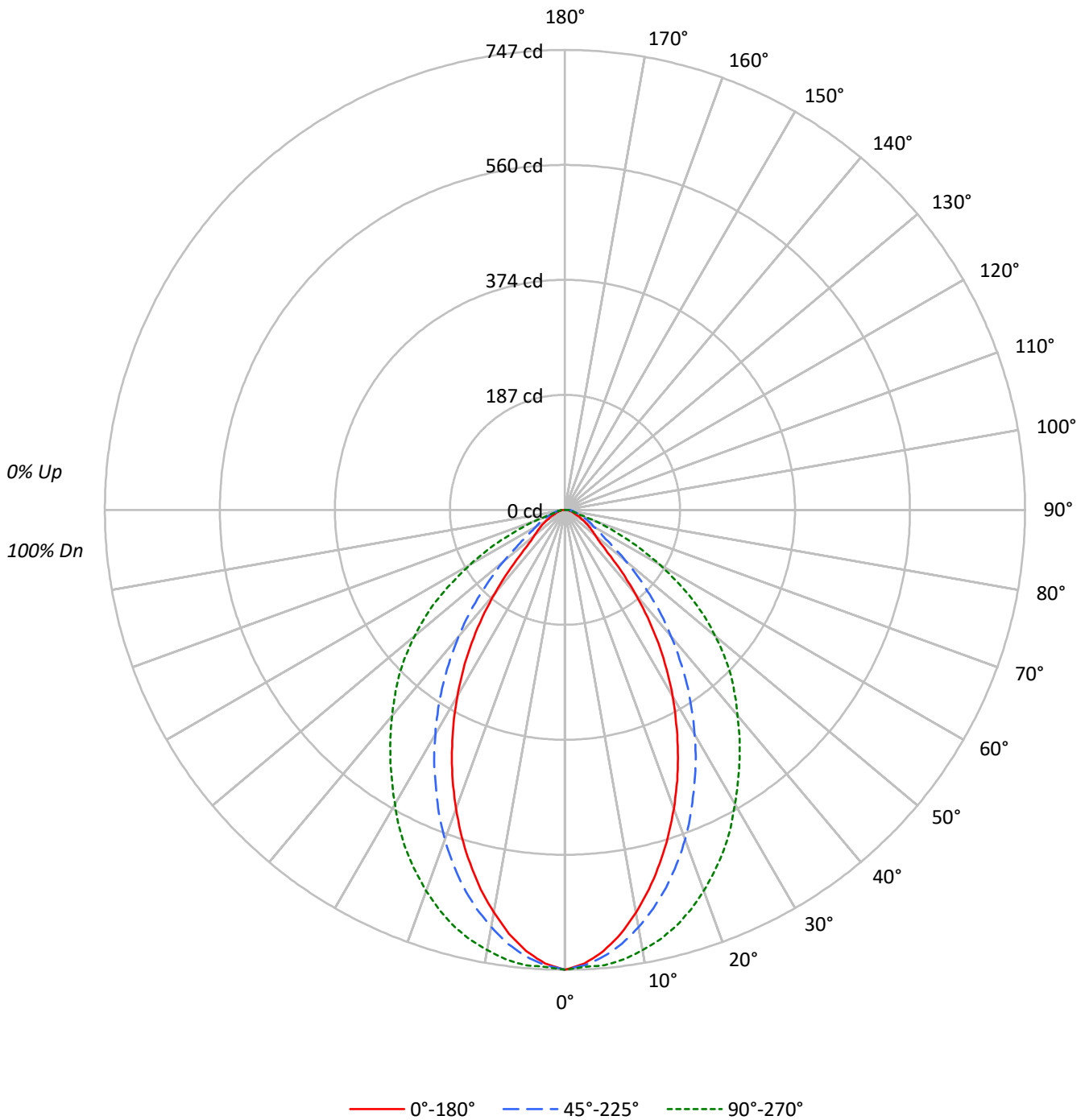
Lumens per Lamp: N/A
Luminaire Lumens: 1050.3 lumens
Efficiency: N/A
Efficacy: 40.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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°	6432	6432	6432
5°	6219	6292	6416
10°	5808	6016	6348
15°	5303	5659	6235
20°	4737	5225	6034
25°	4126	4713	5797
30°	3477	4186	5490
35°	2777	3626	5194
40°	1998	3013	4903
45°	1203	2372	4641
50°	865	1719	4264
55°	728	1156	3780
60°	589	916	3045
65°	465	833	2188
70°	408	695	1173
75°	379	632	569
80°	377	660	521
85°	563	939	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4641 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	6.5
10°-20°	179.7	17.1
20°-30°	233.1	22.2
30°-40°	224.1	21.3
40°-50°	166.2	15.8
50°-60°	101.9	9.7
60°-70°	49.5	4.7
70°-80°	18.9	1.8
80°-90°	8.5	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°	481.3	45.8
0°-40°	705.4	67.2
0°-60°	973.5	92.7
0°-90°	1050.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1050.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	719	730	728	735	742	67
15°	595	612	635	673	699	166
25°	434	456	496	560	610	199
35°	264	288	345	427	494	164
45°	99	124	195	297	381	82
55°	48	50	77	174	252	43
65°	23	25	41	65	107	24
75°	11	18	19	17	17	12
85°	6	10	10	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.9	746.9	746.9	746.9	746.9
2.5°	737.4	746.0	740.3	742.2	743.1
5°	719.4	729.8	727.9	734.6	742.2
7.5°	694.6	707.0	710.8	724.1	736.5
10°	664.2	679.4	688.0	709.9	726.0
12.5°	631.0	647.1	663.3	692.7	714.6
15°	594.9	612.0	634.8	672.8	699.4
17.5°	556.9	575.9	603.4	649.0	680.4
20°	516.9	536.9	570.2	620.5	658.5
22.5°	476.1	497.0	534.1	590.1	634.8
25°	434.3	456.1	496.0	559.7	610.1
27.5°	391.5	414.3	459.9	527.4	582.5
30°	349.7	371.6	421.0	494.1	552.1
32.5°	306.9	329.7	383.0	459.9	522.6
35°	264.2	287.9	344.9	426.7	494.1
37.5°	220.5	246.1	306.0	394.4	465.6
40°	177.7	202.4	268.0	361.1	436.2
42.5°	135.9	162.5	231.9	327.8	408.6
45°	98.8	123.5	194.8	297.4	381.1
47.5°	74.1	89.3	160.6	268.9	350.6
50°	64.6	67.5	128.3	237.6	318.3
52.5°	56.1	58.0	99.8	203.4	286.0
55°	48.5	50.4	77.0	173.9	251.8
57.5°	40.9	42.8	61.8	145.4	212.9
60°	34.2	36.1	53.2	115.9	176.8
62.5°	28.5	29.5	47.5	88.4	141.6
65°	22.8	24.7	40.9	64.6	107.4
67.5°	19.0	20.9	33.3	44.7	75.1
70°	16.2	20.9	27.6	31.4	46.6
72.5°	13.3	19.0	22.8	21.9	21.9
75°	11.4	18.1	19.0	17.1	17.1
77.5°	9.5	16.2	15.2	14.3	13.3
80°	7.6	13.3	13.3	11.4	10.5
82.5°	6.7	10.5	10.5	10.5	8.6
85°	5.7	9.5	9.5	8.6	6.7
87.5°	3.8	7.6	8.6	7.6	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)