

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: P1060566

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

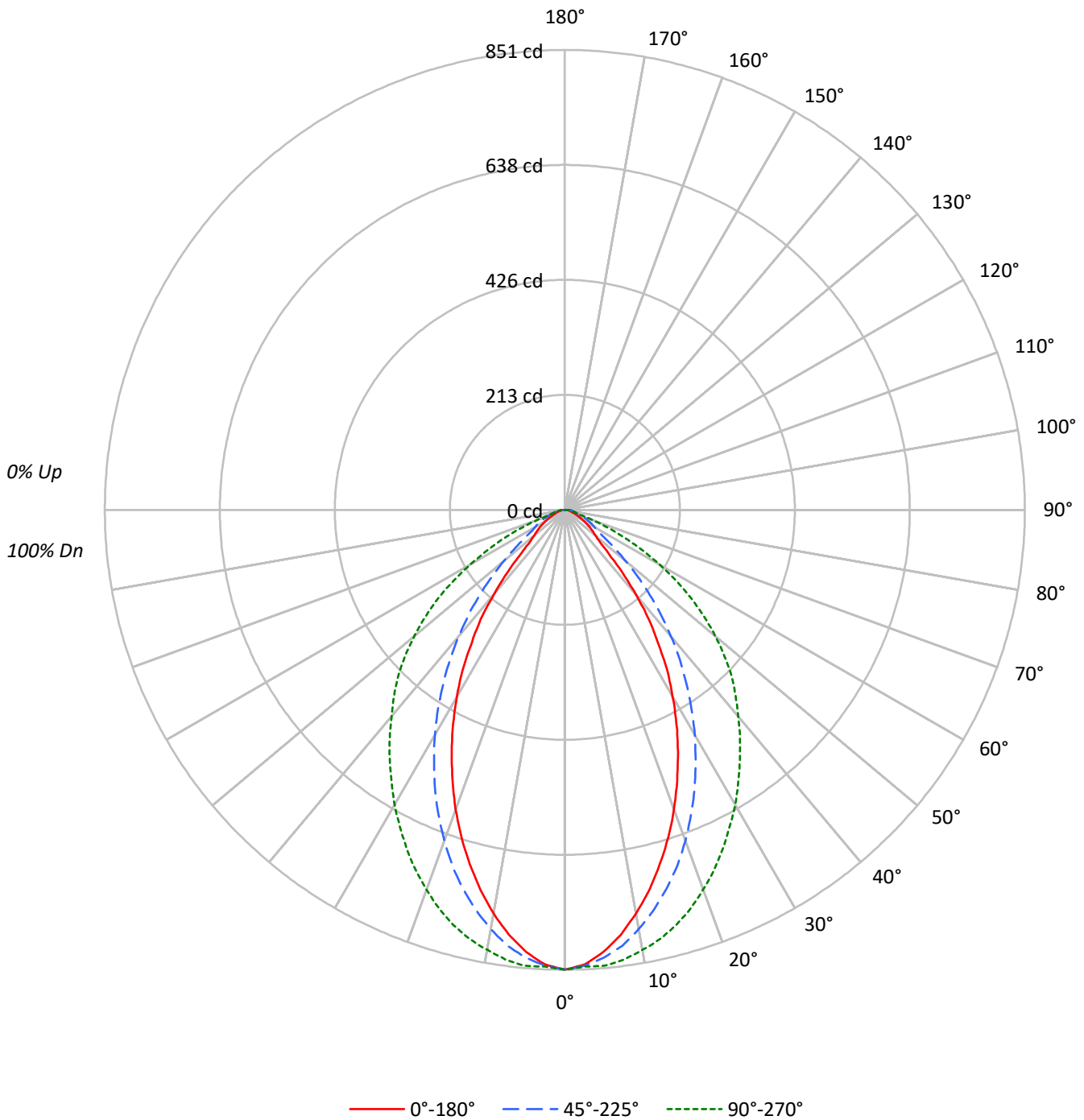
Lumens per Lamp: N/A
Luminaire Lumens: 1204.0 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	104	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	66	75	70	66	73	68	65	63				63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57				57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51				51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43				43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7325	7325	7325
5°	7098	7188	7321
10°	6632	6889	7230
15°	6050	6473	7092
20°	5408	5975	6855
25°	4705	5401	6574
30°	3969	4782	6265
35°	3157	4117	5935
40°	2297	3430	5609
45°	1390	2708	5313
50°	993	1961	4864
55°	842	1327	4295
60°	687	1080	3470
65°	542	968	2498
70°	456	813	1317
75°	413	759	665
80°	426	754	660
85°	563	1126	751

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	6.5
10°-20°	205.2	17.0
20°-30°	266.2	22.1
30°-40°	256.2	21.3
40°-50°	190.6	15.8
50°-60°	117.2	9.7
60°-70°	57.6	4.8
70°-80°	22.5	1.9
80°-90°	10.3	0.9
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°	549.7	45.7
0°-40°	805.9	66.9
0°-60°	1113.7	92.5
0°-90°	1204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	821	834	832	839	847	76
15°	679	700	726	770	796	190
25°	495	522	568	640	692	227
35°	300	329	392	490	565	188
45°	114	142	222	343	436	95
55°	56	58	88	202	286	50
65°	27	28	48	76	123	27
75°	12	22	23	21	20	14
85°	6	10	11	11	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	850.7	850.7	850.7	850.7	850.7
2.5°	842.1	851.6	844.0	844.9	845.9
5°	821.2	833.5	831.6	839.2	846.9
7.5°	792.7	806.9	813.6	828.8	839.2
10°	758.5	774.6	787.9	812.6	826.9
12.5°	720.4	739.4	758.5	791.7	813.6
15°	678.6	700.5	726.1	769.9	795.5
17.5°	635.9	657.7	691.0	741.4	773.7
20°	590.2	614.0	652.0	708.1	748.0
22.5°	542.7	568.4	610.2	673.9	721.4
25°	495.2	521.8	568.4	639.7	691.9
27.5°	447.7	473.3	523.7	603.5	660.6
30°	399.2	425.8	480.9	564.6	630.1
32.5°	352.6	377.3	436.3	527.5	596.9
35°	300.3	328.9	391.6	489.5	564.6
37.5°	255.7	281.3	348.8	451.5	532.3
40°	204.3	232.9	305.1	414.4	499.0
42.5°	156.8	185.3	263.3	377.3	467.6
45°	114.1	141.6	222.4	343.1	436.3
47.5°	86.5	102.6	182.5	309.8	401.1
50°	74.1	78.9	146.4	273.7	363.1
52.5°	65.6	67.5	114.1	237.6	325.1
55°	56.1	58.0	88.4	201.5	286.1
57.5°	47.5	48.5	71.3	167.3	244.3
60°	39.9	40.9	62.7	134.0	201.5
62.5°	33.3	34.2	56.1	103.6	160.6
65°	26.6	28.5	47.5	76.0	122.6
67.5°	21.9	25.7	39.9	53.2	85.5
70°	18.1	24.7	32.3	37.1	52.3
72.5°	15.2	22.8	27.6	26.6	25.7
75°	12.4	21.9	22.8	20.9	20.0
77.5°	10.5	19.0	19.0	17.1	16.2
80°	8.6	15.2	15.2	15.2	13.3
82.5°	7.6	12.4	13.3	13.3	10.5
85°	5.7	10.5	11.4	11.4	7.6
87.5°	3.8	9.5	10.5	9.5	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)