

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: P1060611

Luminaire Tested: S124RDR-S795D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060611
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-S795D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

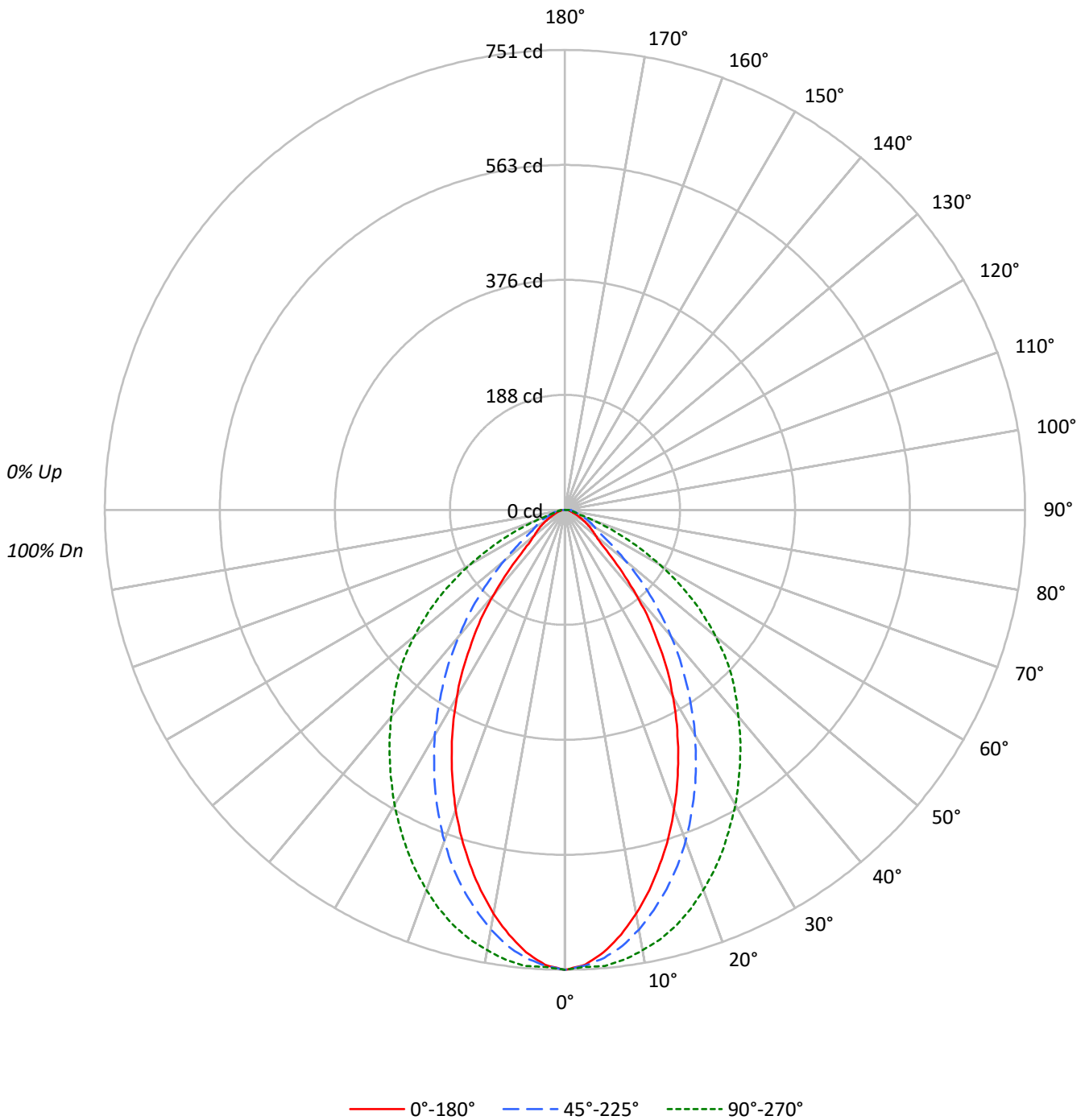
Lumens per Lamp: N/A
Luminaire Lumens: 1063.1 lumens
Efficiency: N/A
Efficacy: 41.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060611

CATALOG NUMBER: S124RDR-S795D940-X4F0-XX-UDD-SVL-W

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°	6468	6468	6468
5°	6268	6347	6464
10°	5856	6083	6384
15°	5342	5716	6262
20°	4776	5276	6053
25°	4154	4769	5805
30°	3505	4223	5532
35°	2788	3635	5240
40°	2028	3028	4953
45°	1226	2392	4691
50°	877	1731	4295
55°	743	1171	3792
60°	606	954	3064
65°	479	856	2207
70°	400	718	1163
75°	363	669	586
80°	377	664	580
85°	494	998	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4691 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	6.5
10°-20°	181.2	17.0
20°-30°	235.0	22.1
30°-40°	226.2	21.3
40°-50°	168.3	15.8
50°-60°	103.5	9.7
60°-70°	50.8	4.8
70°-80°	19.8	1.9
80°-90°	9.0	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°	485.4	45.7
0°-40°	711.6	66.9
0°-60°	983.4	92.5
0°-90°	1063.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1063.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	751	751	751	751	751	
5°	725	736	734	741	748	67
15°	599	618	641	680	702	167
25°	437	461	502	565	611	200
35°	265	290	346	432	498	166
45°	101	125	196	303	385	84
55°	50	51	78	178	253	45
65°	24	25	42	67	108	24
75°	11	19	20	18	18	12
85°	5	9	10	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	751.1	751.1	751.1	751.1	751.1
2.5°	743.6	752.0	745.3	746.1	746.9
5°	725.1	736.0	734.3	741.1	747.8
7.5°	699.9	712.5	718.4	731.8	741.1
10°	669.7	684.0	695.7	717.6	730.1
12.5°	636.1	652.9	669.7	699.1	718.4
15°	599.2	618.5	641.2	679.8	702.4
17.5°	561.5	580.8	610.1	654.6	683.1
20°	521.2	542.2	575.7	625.2	660.5
22.5°	479.2	501.9	538.8	595.0	637.0
25°	437.2	460.7	501.9	564.8	611.0
27.5°	395.3	417.9	462.4	532.9	583.3
30°	352.5	376.0	424.7	498.5	556.4
32.5°	311.4	333.2	385.2	465.8	527.0
35°	265.2	290.4	345.8	432.2	498.5
37.5°	225.8	248.4	308.0	398.6	470.0
40°	180.4	205.6	269.4	365.9	440.6
42.5°	138.5	163.7	232.5	333.2	412.9
45°	100.7	125.0	196.4	303.0	385.2
47.5°	76.4	90.6	161.1	273.6	354.2
50°	65.5	69.7	129.2	241.7	320.6
52.5°	57.9	59.6	100.7	209.8	287.0
55°	49.5	51.2	78.0	177.9	252.6
57.5°	42.0	42.8	62.9	147.7	215.7
60°	35.2	36.1	55.4	118.3	177.9
62.5°	29.4	30.2	49.5	91.5	141.8
65°	23.5	25.2	42.0	67.1	108.3
67.5°	19.3	22.7	35.2	47.0	75.5
70°	15.9	21.8	28.5	32.7	46.2
72.5°	13.4	20.1	24.3	23.5	22.7
75°	10.9	19.3	20.1	18.5	17.6
77.5°	9.2	16.8	16.8	15.1	14.3
80°	7.6	13.4	13.4	13.4	11.7
82.5°	6.7	10.9	11.7	11.7	9.2
85°	5.0	9.2	10.1	10.1	6.7
87.5°	3.4	8.4	9.2	8.4	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)