

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: P1060269

Luminaire Tested: S124RDR-S1020D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060269
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-S1020D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

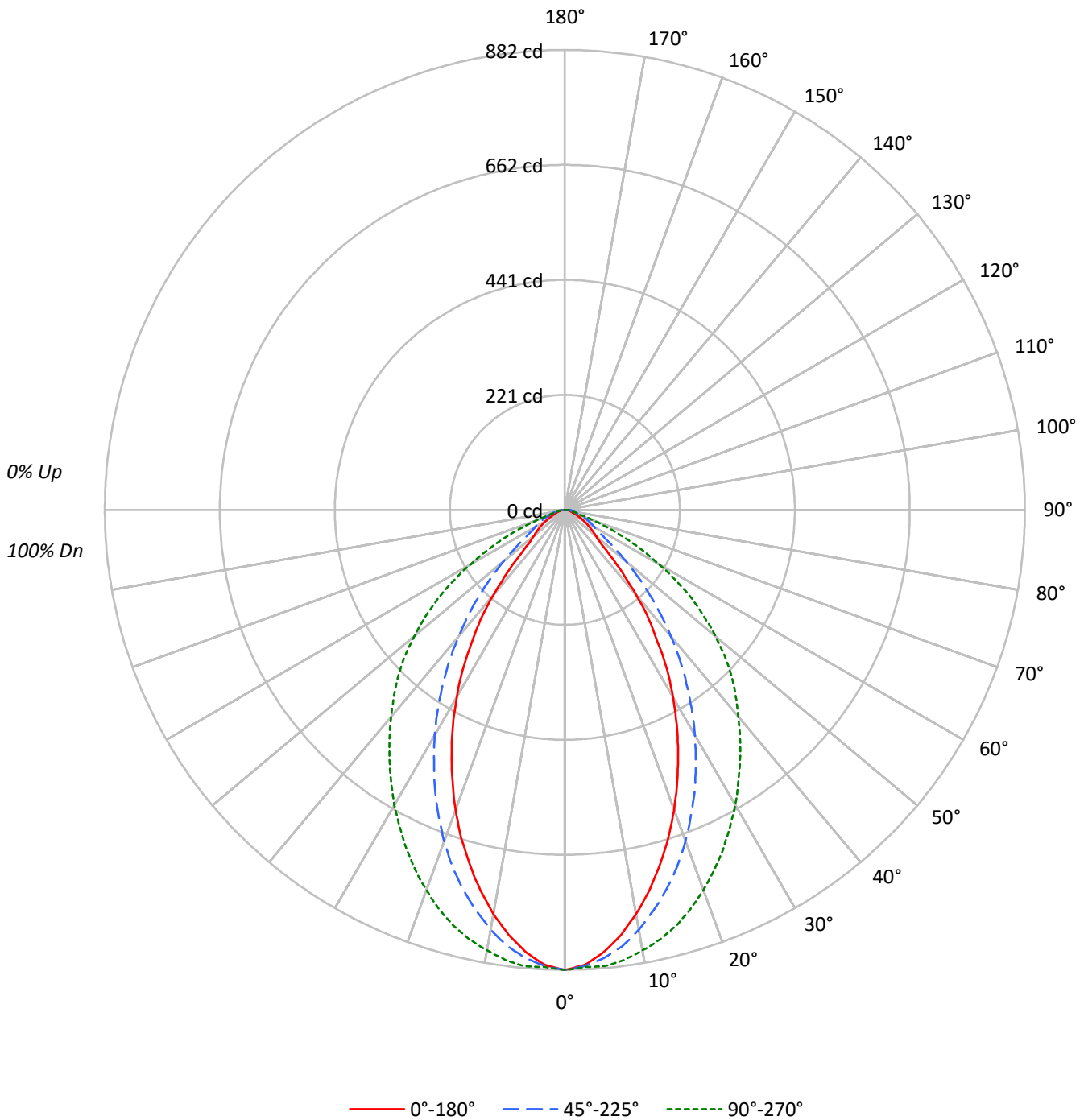
Lumens per Lamp: N/A
Luminaire Lumens: 1249.1 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7599	7599	7599
5°	7365	7458	7595
10°	6881	7148	7501
15°	6277	6716	7357
20°	5611	6198	7111
25°	4881	5603	6821
30°	4118	4962	6501
35°	3276	4271	6157
40°	2383	3558	5819
45°	1441	2809	5512
50°	1030	2035	5046
55°	874	1377	4456
60°	713	1121	3599
65°	562	1005	2592
70°	471	843	1365
75°	426	789	689
80°	441	784	684
85°	583	1166	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5512 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	6.5
10°-20°	212.9	17.0
20°-30°	276.1	22.1
30°-40°	265.8	21.3
40°-50°	197.7	15.8
50°-60°	121.6	9.7
60°-70°	59.7	4.8
70°-80°	23.3	1.9
80°-90°	10.6	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°	570.3	45.7
0°-40°	836.1	66.9
0°-60°	1155.5	92.5
0°-90°	1249.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	852	865	863	871	879	79
15°	704	727	753	799	825	197
25°	514	541	590	664	718	235
35°	312	341	406	508	586	195
45°	118	147	231	356	453	98
55°	58	60	92	209	297	52
65°	28	30	49	79	127	28
75°	13	23	24	22	21	14
85°	6	11	12	12	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.5	882.5	882.5	882.5	882.5
2.5°	873.7	883.5	875.6	876.6	877.6
5°	852.0	864.8	862.8	870.7	878.6
7.5°	822.4	837.2	844.1	859.9	870.7
10°	786.9	803.6	817.5	843.1	857.9
12.5°	747.4	767.2	786.9	821.4	844.1
15°	704.1	726.7	753.4	798.7	825.3
17.5°	659.7	682.4	716.9	769.1	802.7
20°	612.3	637.0	676.4	734.6	776.0
22.5°	563.0	589.7	633.1	699.1	748.4
25°	513.7	541.4	589.7	663.6	717.9
27.5°	464.4	491.1	543.3	626.2	685.3
30°	414.1	441.8	499.0	585.7	653.8
32.5°	365.8	391.5	452.6	547.3	619.3
35°	311.6	341.2	406.3	507.8	585.7
37.5°	265.3	291.9	361.9	468.4	552.2
40°	212.0	241.6	316.5	429.9	517.7
42.5°	162.7	192.3	273.1	391.5	485.1
45°	118.3	146.9	230.7	356.0	452.6
47.5°	89.7	106.5	189.3	321.5	416.1
50°	76.9	81.8	151.9	284.0	376.7
52.5°	68.0	70.0	118.3	246.5	337.2
55°	58.2	60.2	91.7	209.0	296.8
57.5°	49.3	50.3	74.0	173.5	253.4
60°	41.4	42.4	65.1	139.0	209.0
62.5°	34.5	35.5	58.2	107.5	166.6
65°	27.6	29.6	49.3	78.9	127.2
67.5°	22.7	26.6	41.4	55.2	88.7
70°	18.7	25.6	33.5	38.5	54.2
72.5°	15.8	23.7	28.6	27.6	26.6
75°	12.8	22.7	23.7	21.7	20.7
77.5°	10.8	19.7	19.7	17.7	16.8
80°	8.9	15.8	15.8	15.8	13.8
82.5°	7.9	12.8	13.8	13.8	10.8
85°	5.9	10.8	11.8	11.8	7.9
87.5°	3.9	9.9	10.8	9.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)