

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: P1060260

Luminaire Tested: S124RDR-S1020D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060260
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-S1020D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

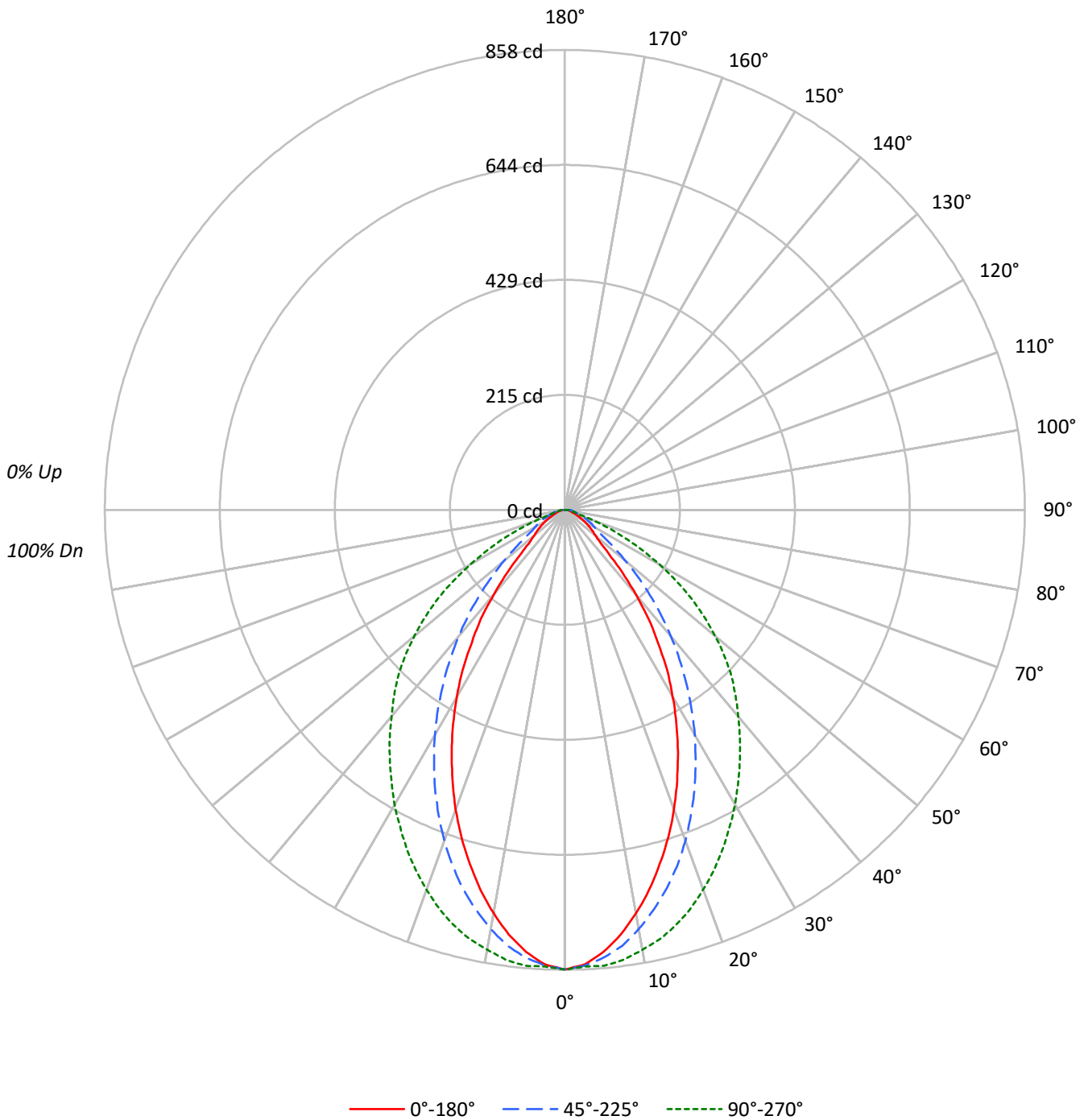
Lumens per Lamp: N/A
Luminaire Lumens: 1213.6 lumens
Efficiency: N/A
Efficacy: 34.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060260

CATALOG NUMBER: S124RDR-S1020D927-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									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	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°	7384	7384	7384
5°	7156	7246	7379
10°	6686	6945	7289
15°	6099	6526	7149
20°	5452	6023	6909
25°	4743	5443	6627
30°	4001	4821	6316
35°	3183	4149	5983
40°	2316	3458	5654
45°	1400	2730	5356
50°	1001	1976	4903
55°	848	1338	4330
60°	692	1088	3498
65°	546	976	2518
70°	458	821	1327
75°	416	765	669
80°	426	759	664
85°	563	1136	761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5356 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	6.5
10°-20°	206.9	17.0
20°-30°	268.3	22.1
30°-40°	258.3	21.3
40°-50°	192.1	15.8
50°-60°	118.2	9.7
60°-70°	58.0	4.8
70°-80°	22.6	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°	554.1	45.7
0°-40°	812.4	66.9
0°-60°	1122.7	92.5
0°-90°	1213.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	828	840	838	846	854	77
15°	684	706	732	776	802	191
25°	499	526	573	645	698	228
35°	303	332	395	493	569	189
45°	115	143	224	346	440	95
55°	56	58	89	203	288	51
65°	27	29	48	77	124	28
75°	12	22	23	21	20	14
85°	6	10	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°	857.5	857.5	857.5	857.5	857.5
2.5°	848.9	858.5	850.8	851.8	852.7
5°	827.8	840.3	838.3	846.0	853.7
7.5°	799.1	813.4	820.1	835.5	846.0
10°	764.6	780.9	794.3	819.2	833.6
12.5°	726.2	745.4	764.6	798.1	820.1
15°	684.1	706.1	732.0	776.1	801.9
17.5°	641.0	663.0	696.5	747.3	779.9
20°	595.0	618.9	657.3	713.8	754.0
22.5°	547.1	572.9	615.1	679.3	727.2
25°	499.2	526.0	572.9	644.8	697.5
27.5°	451.3	477.1	527.9	608.4	665.9
30°	402.4	429.2	484.8	569.1	635.2
32.5°	355.5	380.4	439.8	531.8	601.7
35°	302.8	331.5	394.7	493.4	569.1
37.5°	257.7	283.6	351.6	455.1	536.5
40°	206.0	234.7	307.6	417.7	503.0
42.5°	158.1	186.8	265.4	380.4	471.4
45°	115.0	142.8	224.2	345.9	439.8
47.5°	87.2	103.5	184.0	312.3	404.3
50°	74.7	79.5	147.5	275.9	366.0
52.5°	66.1	68.0	115.0	239.5	327.7
55°	56.5	58.4	89.1	203.1	288.4
57.5°	47.9	48.9	71.9	168.6	246.2
60°	40.2	41.2	63.2	135.1	203.1
62.5°	33.5	34.5	56.5	104.4	161.9
65°	26.8	28.7	47.9	76.6	123.6
67.5°	22.0	25.9	40.2	53.7	86.2
70°	18.2	24.9	32.6	37.4	52.7
72.5°	15.3	23.0	27.8	26.8	25.9
75°	12.5	22.0	23.0	21.1	20.1
77.5°	10.5	19.2	19.2	17.2	16.3
80°	8.6	15.3	15.3	15.3	13.4
82.5°	7.7	12.5	13.4	13.4	10.5
85°	5.7	10.5	11.5	11.5	7.7
87.5°	3.8	9.6	10.5	9.6	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)