

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: P1060294

Luminaire Tested: S124RDR-S1020D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

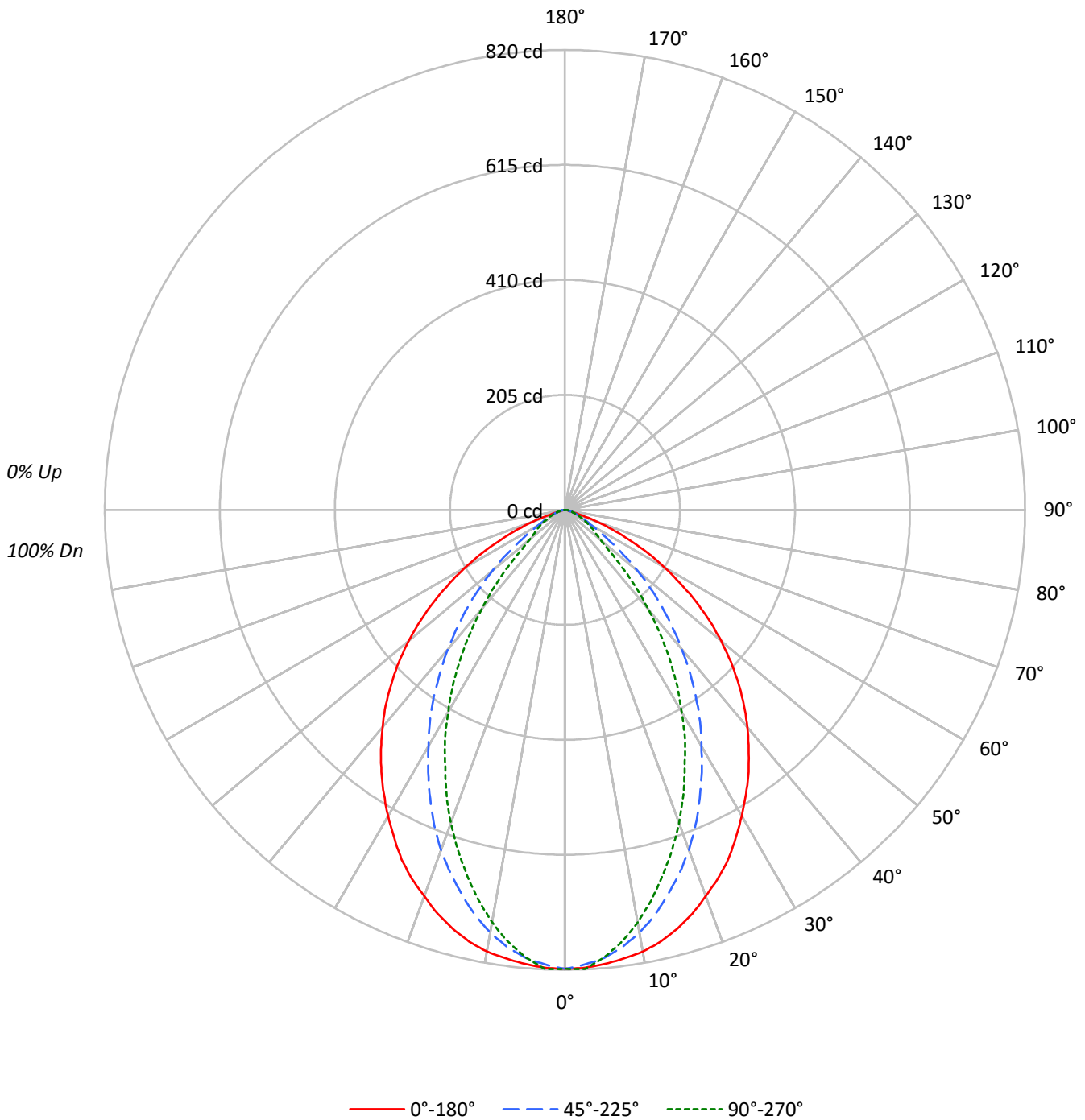
Lumens per Lamp: N/A
Luminaire Lumens: 1206.6 lumens
Efficiency: N/A
Efficacy: 34.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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: P1060294

CATALOG NUMBER: S124RDR-S1020D950-X4F0-XX-UDD-SVL-B

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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7046	7046	7046
5°	7024	6934	6924
10°	6994	6692	6531
15°	6895	6330	6011
20°	6717	5914	5450
25°	6538	5399	4796
30°	6269	4836	4137
35°	5997	4277	3416
40°	5688	3641	2591
45°	5319	2975	1740
50°	4864	2255	1081
55°	4274	1488	917
60°	3534	913	754
65°	2559	705	611
70°	1392	521	463
75°	306	383	423
80°	228	288	342
85°	227	227	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5319 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	6.3
10°-20°	201.4	16.7
20°-30°	266.8	22.1
30°-40°	264.8	21.9
40°-50°	203.7	16.9
50°-60°	121.4	10.1
60°-70°	55.2	4.6
70°-80°	14.3	1.2
80°-90°	3.2	0.3
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°	543.9	45.1
0°-40°	808.7	67.0
0°-60°	1133.9	94.0
0°-90°	1206.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	813	814	802	802	801	77
15°	773	754	710	686	674	218
25°	688	638	568	521	505	316
35°	570	499	407	345	325	356
45°	437	352	244	171	143	336
55°	285	203	99	62	61	254
65°	126	75	35	30	30	126
75°	9	12	12	13	13	19
85°	2	2	2	4	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.3	818.3	818.3	818.3	818.3
2.5°	817.2	818.3	811.4	817.2	819.5
5°	812.6	813.7	802.2	802.2	801.0
7.5°	806.8	804.5	786.1	779.1	776.8
10°	799.9	791.8	765.3	751.5	746.9
12.5°	788.4	775.7	740.0	720.4	712.3
15°	773.4	753.8	710.0	685.8	674.3
17.5°	754.9	730.7	678.9	647.7	635.1
20°	733.0	700.8	645.4	606.3	594.7
22.5°	712.3	672.0	608.6	563.6	550.9
25°	688.1	638.5	568.2	521.0	504.8
27.5°	659.3	606.3	527.9	479.5	463.3
30°	630.5	571.7	486.4	435.7	416.1
32.5°	600.5	535.9	448.4	390.7	372.3
35°	570.5	499.1	406.9	344.6	325.0
37.5°	538.3	462.2	365.4	300.8	278.9
40°	506.0	426.5	323.9	258.2	230.5
42.5°	472.6	389.6	283.5	214.4	186.7
45°	436.8	351.5	244.3	170.6	142.9
47.5°	401.1	315.8	205.2	127.9	102.6
50°	363.1	277.8	168.3	93.4	80.7
52.5°	325.0	240.9	131.4	72.6	69.2
55°	284.7	202.9	99.1	62.2	61.1
57.5°	243.2	168.3	71.5	54.2	51.9
60°	205.2	136.0	53.0	46.1	43.8
62.5°	166.0	102.6	43.8	38.0	35.7
65°	125.6	74.9	34.6	30.0	30.0
67.5°	91.1	50.7	27.7	24.2	23.1
70°	55.3	31.1	20.7	19.6	18.4
72.5°	27.7	18.4	16.1	15.0	15.0
75°	9.2	11.5	11.5	12.7	12.7
77.5°	6.9	8.1	8.1	9.2	9.2
80°	4.6	5.8	5.8	6.9	6.9
82.5°	3.5	3.5	4.6	4.6	5.8
85°	2.3	2.3	2.3	3.5	3.5
87.5°	1.2	1.2	1.2	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)