

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: P1060444

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060444
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D940-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

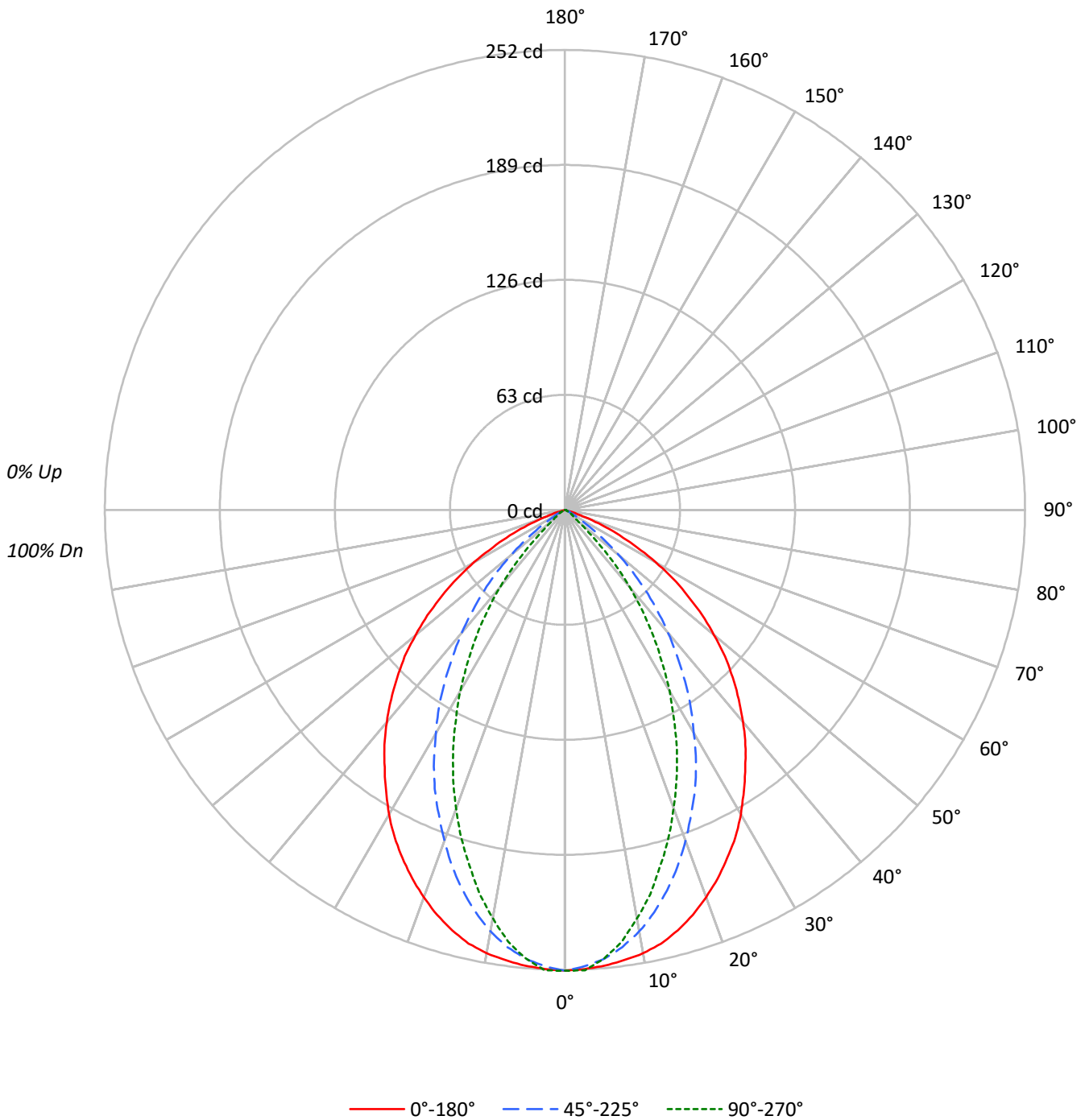
Lumens per Lamp: N/A
Luminaire Lumens: 329.7 lumens
Efficiency: N/A
Efficacy: 26.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2174	2174	2174
5°	2167	2135	2132
10°	2157	2051	1988
15°	2127	1926	1799
20°	2070	1769	1595
25°	2000	1602	1377
30°	1916	1404	1139
35°	1810	1205	886
40°	1706	988	619
45°	1582	760	307
50°	1428	513	103
55°	1233	263	71
60°	987	95	50
65°	676	53	22
70°	302	28	18
75°	0	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1582 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	7.1
10°-20°	61.1	18.5
20°-30°	79.1	24.0
30°-40°	75.2	22.8
40°-50°	53.2	16.1
50°-60°	27.3	8.3
60°-70°	9.6	2.9
70°-80°	0.8	0.3
80°-90°	0.0	0.0
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°	163.6	49.6
0°-40°	238.8	72.4
0°-60°	319.3	96.8
0°-90°	329.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	329.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	252	252	252	252	252	
5°	251	251	247	247	247	24
15°	239	231	216	206	202	67
25°	210	194	169	151	145	97
35°	172	147	115	92	84	108
45°	130	100	62	36	25	100
55°	82	54	18	5	5	73
65°	33	16	3	2	1	33
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	252.5	252.5	252.5	252.5	252.5
2.5°	251.8	252.5	250.3	252.1	252.5
5°	250.7	251.0	247.0	247.0	246.7
7.5°	248.9	248.1	241.6	239.0	238.6
10°	246.7	244.1	234.6	229.2	227.3
12.5°	243.4	238.6	225.9	217.8	215.7
15°	238.6	231.3	216.0	205.8	201.8
17.5°	232.8	223.3	205.1	192.7	188.7
20°	225.9	213.8	193.0	179.2	174.1
22.5°	218.6	204.7	180.6	164.9	159.8
25°	210.5	194.1	168.6	150.7	144.9
27.5°	202.2	182.8	155.4	136.8	129.2
30°	192.7	171.5	141.2	121.9	114.6
32.5°	182.4	159.1	128.4	107.6	98.9
35°	172.2	147.1	114.6	92.3	84.3
37.5°	162.4	135.7	100.7	77.4	69.7
40°	151.8	123.3	87.9	63.9	55.1
42.5°	140.9	111.3	74.8	50.0	40.5
45°	129.9	100.0	62.4	35.8	25.2
47.5°	119.0	87.9	50.4	22.6	13.5
50°	106.6	76.3	38.3	12.0	7.7
52.5°	94.9	65.3	27.4	6.9	5.8
55°	82.1	54.0	17.5	5.1	4.7
57.5°	70.1	43.1	9.9	4.0	3.6
60°	57.3	33.2	5.5	3.3	2.9
62.5°	44.5	24.1	3.6	2.2	1.8
65°	33.2	16.1	2.6	1.5	1.1
67.5°	21.9	9.1	1.8	0.7	0.7
70°	12.0	4.4	1.1	0.7	0.7
72.5°	4.4	1.5	0.7	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)