

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: P1060383

Luminaire Tested: S124RDR-S350D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

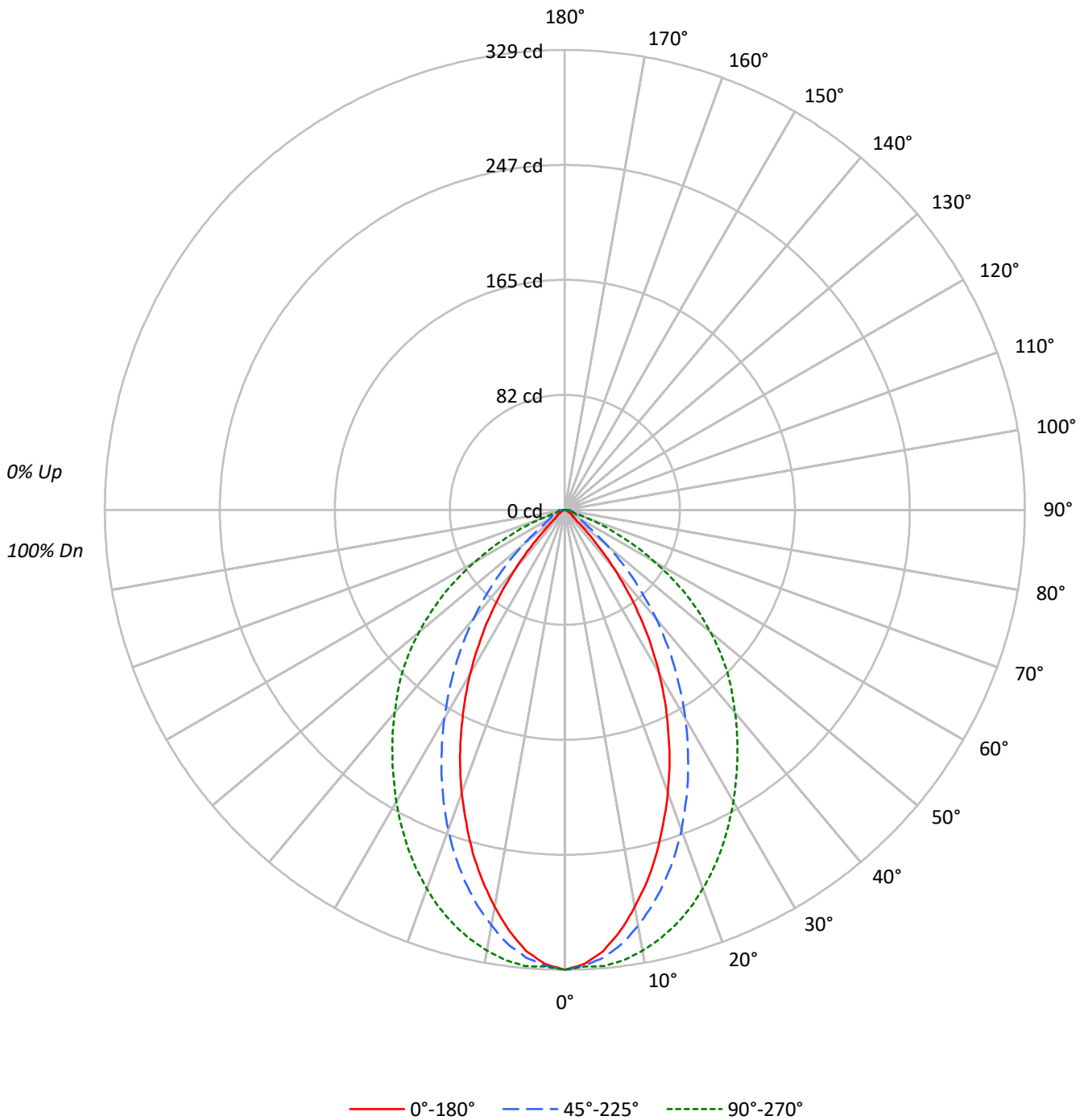
Lumens per Lamp: N/A
Luminaire Lumens: 414.7 lumens
Efficiency: N/A
Efficacy: 33.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2833	2833	2833
5°	2738	2777	2831
10°	2523	2641	2800
15°	2265	2455	2737
20°	1975	2233	2644
25°	1666	1981	2528
30°	1344	1712	2396
35°	994	1433	2261
40°	616	1142	2127
45°	245	833	2003
50°	109	522	1821
55°	87	273	1594
60°	60	207	1271
65°	39	204	874
70°	38	184	408
75°	50	180	180
80°	74	208	208
85°	148	415	306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2003 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.2	7.3
10°-20°	77.9	18.8
20°-30°	98.3	23.7
30°-40°	90.2	21.8
40°-50°	61.4	14.8
50°-60°	33.5	8.1
60°-70°	14.5	3.5
70°-80°	5.3	1.3
80°-90°	3.4	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°	206.4	49.8
0°-40°	296.6	71.5
0°-60°	391.5	94.4
0°-90°	414.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	414.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	329	329	329	329	329	
5°	317	321	321	325	328	29
15°	254	263	275	295	307	71
25°	175	188	208	242	266	80
35°	95	108	136	180	215	58
45°	20	34	68	121	164	19
55°	6	6	18	67	106	5
65°	2	3	10	21	43	2
75°	2	5	5	5	5	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	329.0	329.0	329.0	329.0	329.0
2.5°	325.2	329.0	326.3	327.1	327.1
5°	316.7	320.9	321.3	324.8	327.5
7.5°	303.9	310.1	313.2	320.2	324.8
10°	288.5	295.8	302.0	314.0	320.2
12.5°	271.9	280.4	289.7	305.5	314.4
15°	254.1	263.0	275.4	295.1	307.0
17.5°	234.4	245.2	260.3	283.9	298.5
20°	215.5	226.3	243.7	270.3	288.5
22.5°	195.8	207.0	226.3	256.1	277.7
25°	175.3	187.7	208.5	241.8	266.1
27.5°	155.3	168.4	190.4	226.7	253.7
30°	135.2	148.3	172.2	211.3	241.0
32.5°	114.7	128.2	154.1	195.0	227.9
35°	94.6	108.5	136.3	179.6	215.1
37.5°	74.2	88.8	118.6	164.5	202.4
40°	54.8	69.5	101.6	149.5	189.2
42.5°	36.7	51.4	84.2	134.8	176.9
45°	20.1	33.6	68.4	121.3	164.5
47.5°	10.8	18.5	52.9	108.1	150.6
50°	8.1	10.0	39.0	94.2	135.9
52.5°	7.0	7.7	27.0	79.6	121.3
55°	5.8	6.2	18.2	66.8	106.2
57.5°	4.6	5.0	13.5	54.1	90.0
60°	3.5	4.2	12.0	41.7	73.8
62.5°	2.7	3.5	11.2	30.5	58.3
65°	1.9	2.7	10.0	20.9	42.9
67.5°	1.9	3.1	8.5	13.5	29.0
70°	1.5	4.2	7.3	8.9	16.2
72.5°	1.5	4.6	6.2	6.2	6.2
75°	1.5	5.0	5.4	5.4	5.4
77.5°	1.5	4.6	5.0	4.6	4.6
80°	1.5	4.2	4.2	4.2	4.2
82.5°	1.5	3.9	4.2	4.2	3.5
85°	1.5	3.5	4.2	4.2	3.1
87.5°	1.2	3.5	3.9	3.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)