

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: P1060527

Luminaire Tested: S124RDR-S575D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060527
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-S575D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

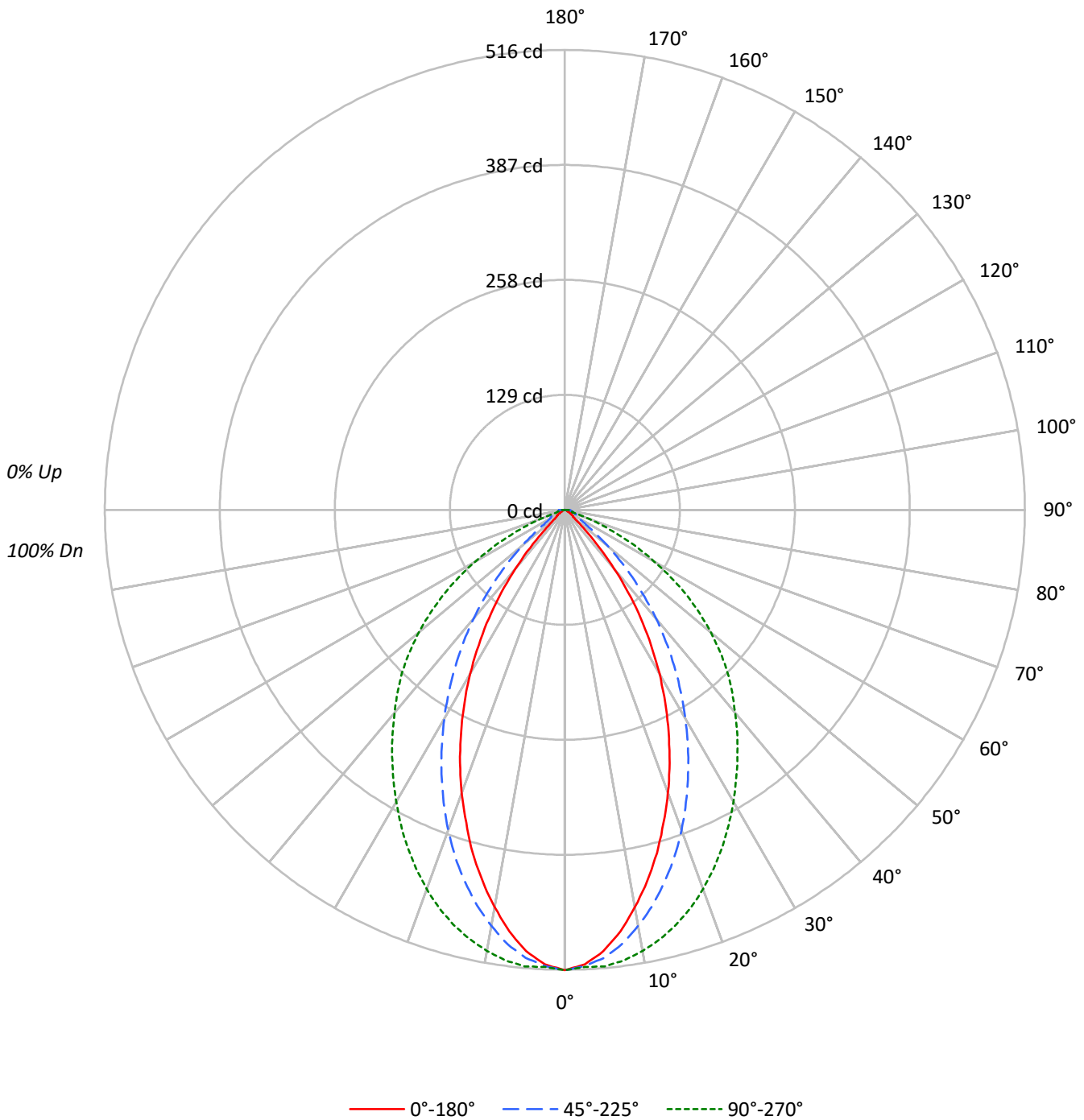
Lumens per Lamp: N/A
Luminaire Lumens: 651.0 lumens
Efficiency: N/A
Efficacy: 33.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	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°	4448	4448	4448
5°	4297	4360	4444
10°	3959	4145	4394
15°	3556	3853	4296
20°	3100	3505	4149
25°	2615	3110	3969
30°	2110	2689	3762
35°	1561	2250	3550
40°	968	1792	3339
45°	384	1307	3144
50°	170	820	2859
55°	137	428	2503
60°	95	324	1994
65°	61	322	1371
70°	60	290	642
75°	80	283	283
80°	119	332	332
85°	237	662	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3144 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	7.3
10°-20°	122.3	18.8
20°-30°	154.3	23.7
30°-40°	141.6	21.8
40°-50°	96.4	14.8
50°-60°	52.5	8.1
60°-70°	22.7	3.5
70°-80°	8.3	1.3
80°-90°	5.4	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°	324.0	49.8
0°-40°	465.6	71.5
0°-60°	614.6	94.4
0°-90°	651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	651.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	497	504	504	510	514	46
15°	399	413	432	463	482	111
25°	275	295	327	380	418	126
35°	148	170	214	282	338	92
45°	32	53	107	190	258	29
55°	9	10	28	105	167	8
65°	3	4	16	33	67	3
75°	2	8	8	8	8	3
85°	2	6	7	7	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	516.5	516.5	516.5	516.5	516.5
2.5°	510.4	516.5	512.2	513.4	513.4
5°	497.1	503.7	504.4	509.8	514.1
7.5°	477.1	486.8	491.6	502.5	509.8
10°	452.8	464.3	474.0	492.8	502.5
12.5°	426.8	440.1	454.6	479.5	493.4
15°	398.9	412.8	432.2	463.1	481.9
17.5°	368.0	384.9	408.6	445.6	468.6
20°	338.3	355.2	382.5	424.3	452.8
22.5°	307.3	324.9	355.2	401.9	435.9
25°	275.2	294.6	327.3	379.5	417.7
27.5°	243.7	264.3	298.9	355.8	398.3
30°	212.2	232.8	270.4	331.6	378.3
32.5°	180.0	201.3	241.9	306.1	357.7
35°	148.5	170.3	214.0	281.9	337.7
37.5°	116.4	139.4	186.1	258.2	317.6
40°	86.1	109.1	159.4	234.6	297.0
42.5°	57.6	80.6	132.2	211.6	277.6
45°	31.5	52.7	107.3	190.3	258.2
47.5°	17.0	29.1	83.0	169.7	236.4
50°	12.7	15.8	61.2	147.9	213.4
52.5°	10.9	12.1	42.4	124.9	190.3
55°	9.1	9.7	28.5	104.9	166.7
57.5°	7.3	7.9	21.2	84.9	141.2
60°	5.5	6.7	18.8	65.5	115.8
62.5°	4.2	5.5	17.6	47.9	91.5
65°	3.0	4.2	15.8	32.7	67.3
67.5°	3.0	4.8	13.3	21.2	45.5
70°	2.4	6.7	11.5	13.9	25.5
72.5°	2.4	7.3	9.7	9.7	9.7
75°	2.4	7.9	8.5	8.5	8.5
77.5°	2.4	7.3	7.9	7.3	7.3
80°	2.4	6.7	6.7	6.7	6.7
82.5°	2.4	6.1	6.7	6.7	5.5
85°	2.4	5.5	6.7	6.7	4.8
87.5°	1.8	5.5	6.1	6.1	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)