

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: P1060542

Luminaire Tested: S124RDR-S575D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

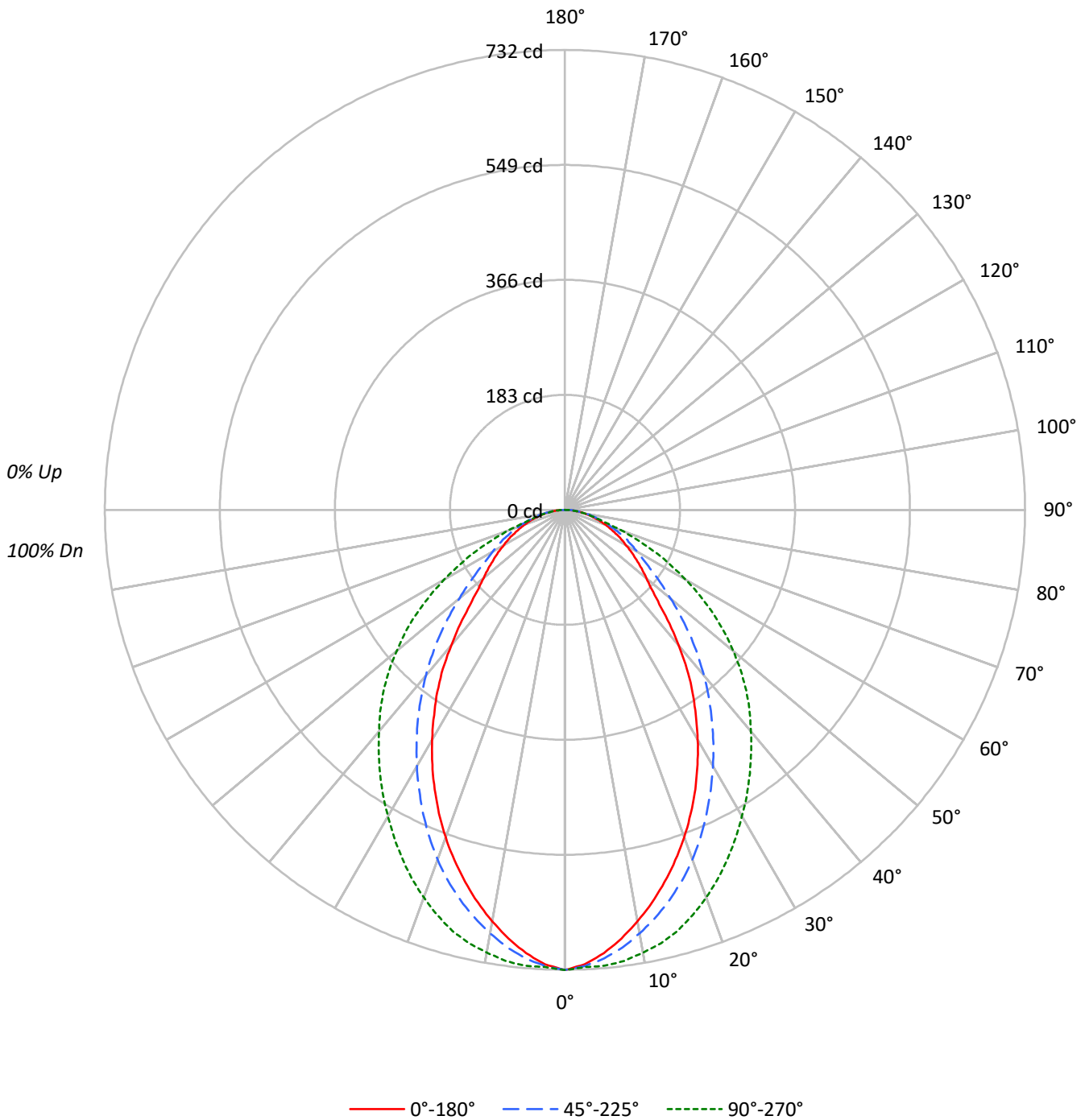
Lumens per Lamp: N/A
Luminaire Lumens: 1343.9 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65	65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57	57	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50	50	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40	40	40	40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33	33	33	33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31	31	31	31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6307	6307	6307
5°	6123	6196	6297
10°	5815	5984	6256
15°	5466	5732	6182
20°	5084	5429	6017
25°	4661	5068	5820
30°	4202	4685	5600
35°	3720	4286	5390
40°	3162	3869	5173
45°	2589	3417	4972
50°	2267	2935	4679
55°	2082	2530	4330
60°	1931	2277	3818
65°	1809	2139	3195
70°	1697	1959	2399
75°	1597	1790	1747
80°	1478	1641	1478
85°	1344	1601	1284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4972 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	5.0
10°-20°	182.1	13.6
20°-30°	248.9	18.5
30°-40°	261.6	19.5
40°-50°	227.0	16.9
50°-60°	171.3	12.7
60°-70°	111.0	8.3
70°-80°	57.0	4.2
80°-90°	17.3	1.3
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°	498.7	37.1
0°-40°	760.4	56.6
0°-60°	1158.6	86.2
0°-90°	1343.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1343.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	708	718	717	723	728	66
15°	613	628	643	672	694	172
25°	491	508	533	574	612	225
35°	354	373	408	462	513	220
45°	213	233	281	351	408	167
55°	139	143	168	239	288	125
65°	89	91	105	127	157	88
75°	48	54	54	54	52	51
85°	14	17	16	16	13	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.4	732.4	732.4	732.4	732.4
2.5°	724.0	733.0	726.6	727.9	728.5
5°	708.4	718.1	716.8	722.7	728.5
7.5°	688.3	700.0	702.6	714.2	724.0
10°	665.0	678.0	684.4	703.2	715.5
12.5°	640.4	653.3	665.0	689.0	706.5
15°	613.1	628.0	643.0	672.1	693.5
17.5°	584.6	600.2	619.0	650.7	676.0
20°	554.8	570.4	592.4	626.7	656.6
22.5°	523.0	540.5	563.9	600.8	635.8
25°	490.6	508.1	533.4	574.3	612.5
27.5°	456.9	475.1	502.3	547.7	588.5
30°	422.6	442.0	471.2	519.2	563.2
32.5°	387.6	408.3	439.4	490.6	538.6
35°	353.9	373.3	407.7	462.1	512.7
37.5°	318.9	338.3	375.3	434.3	486.8
40°	281.3	302.7	344.2	405.1	460.2
42.5°	246.3	267.7	312.4	377.2	434.9
45°	212.6	232.7	280.6	350.6	408.3
47.5°	186.7	200.9	248.9	324.7	379.8
50°	169.2	175.6	219.1	296.2	349.3
52.5°	153.6	158.8	191.8	267.7	319.5
55°	138.7	142.6	168.5	239.2	288.4
57.5°	125.7	127.7	147.8	210.6	254.7
60°	112.1	114.7	132.2	181.5	221.7
62.5°	101.1	102.4	118.6	153.6	188.6
65°	88.8	90.7	105.0	127.0	156.8
67.5°	77.8	81.0	90.7	103.7	123.8
70°	67.4	71.9	77.8	84.3	95.3
72.5°	57.7	62.9	66.1	68.7	66.8
75°	48.0	53.8	53.8	54.4	52.5
77.5°	38.9	44.1	43.4	42.8	40.2
80°	29.8	34.4	33.1	32.4	29.8
82.5°	22.0	25.3	24.0	23.3	20.1
85°	13.6	16.9	16.2	15.6	13.0
87.5°	6.5	9.7	9.1	8.4	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)