

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: P1060488

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060488
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-S575D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

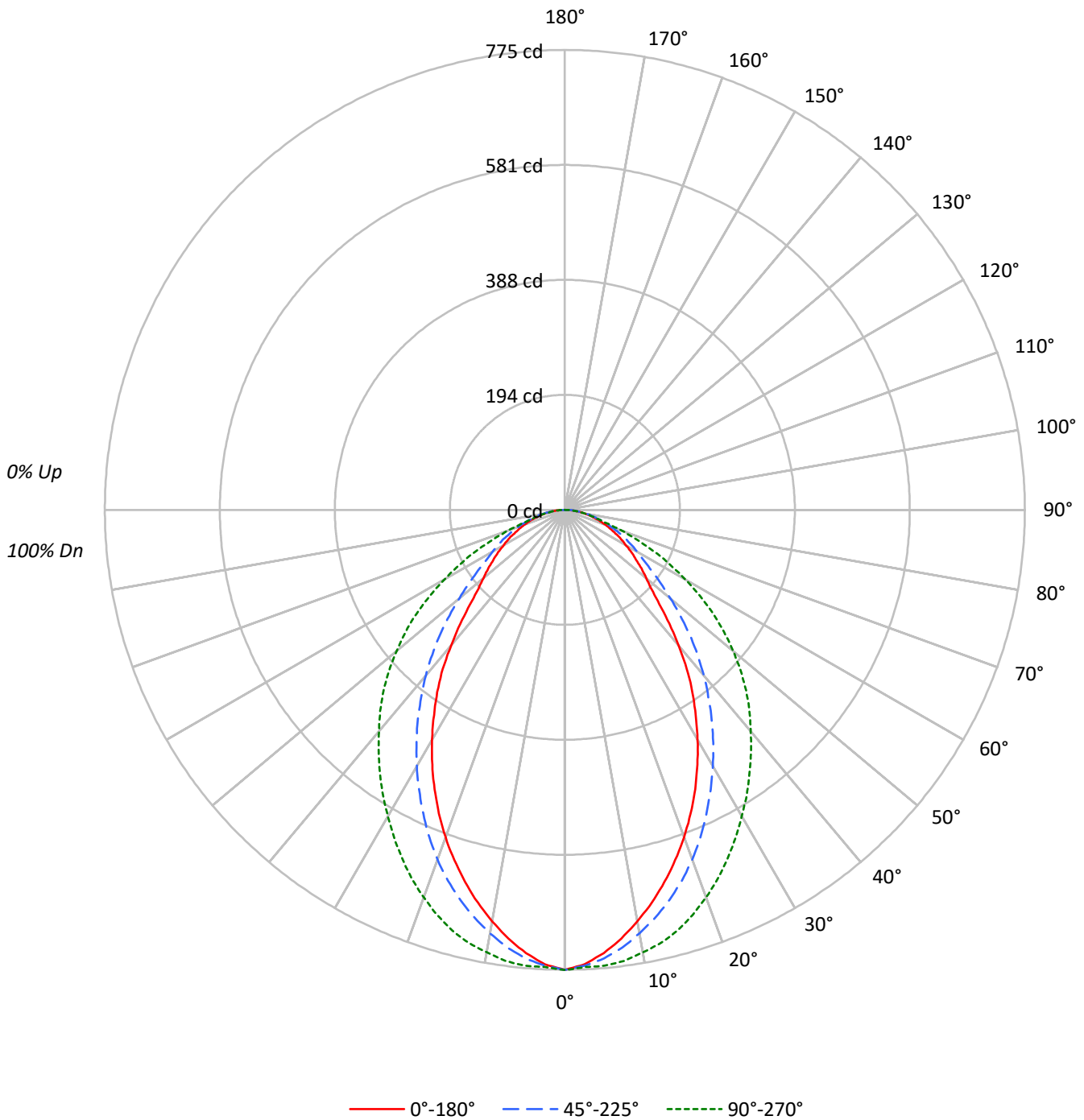
Lumens per Lamp: N/A
Luminaire Lumens: 1422.6 lumens
Efficiency: N/A
Efficacy: 72.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				
RC	80					70					50					30				
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75		
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65		
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57		
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50		
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45		
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40		
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37		
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33		
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6676	6676	6676
5°	6482	6559	6666
10°	6155	6335	6623
15°	5786	6067	6544
20°	5382	5747	6369
25°	4935	5365	6161
30°	4448	4960	5928
35°	3938	4537	5705
40°	3348	4095	5476
45°	2740	3618	5263
50°	2399	3107	4954
55°	2204	2678	4583
60°	2044	2411	4040
65°	1915	2264	3382
70°	1798	2072	2540
75°	1690	1893	1850
80°	1567	1736	1567
85°	1423	1699	1354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5263 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	5.0
10°-20°	192.8	13.6
20°-30°	263.5	18.5
30°-40°	276.9	19.5
40°-50°	240.3	16.9
50°-60°	181.3	12.7
60°-70°	117.5	8.3
70°-80°	60.3	4.2
80°-90°	18.3	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°	527.9	37.1
0°-40°	804.9	56.6
0°-60°	1226.5	86.2
0°-90°	1422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	750	760	759	765	771	70
15°	649	665	681	712	734	182
25°	519	538	565	608	648	238
35°	375	395	432	489	543	233
45°	225	246	297	371	432	177
55°	147	151	178	253	305	132
65°	94	96	111	134	166	94
75°	51	57	57	58	56	54
85°	14	18	17	16	14	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.3	775.3	775.3	775.3	775.3
2.5°	766.4	776.0	769.1	770.5	771.2
5°	749.9	760.2	758.8	765.0	771.2
7.5°	728.6	741.0	743.7	756.1	766.4
10°	703.9	717.7	724.5	744.4	757.4
12.5°	677.9	691.6	703.9	729.3	747.8
15°	649.0	664.8	680.6	711.5	734.1
17.5°	618.9	635.3	655.2	688.8	715.6
20°	587.3	603.8	627.1	663.5	695.0
22.5°	553.7	572.2	596.9	636.0	673.1
25°	519.4	537.9	564.7	607.9	648.4
27.5°	483.7	502.9	531.7	579.7	623.0
30°	447.3	467.9	498.8	549.6	596.2
32.5°	410.3	432.2	465.2	519.4	570.1
35°	374.6	395.2	431.6	489.2	542.7
37.5°	337.6	358.1	397.2	459.7	515.3
40°	297.8	320.4	364.3	428.8	487.1
42.5°	260.7	283.4	330.7	399.3	460.4
45°	225.0	246.3	297.1	371.2	432.2
47.5°	197.6	212.7	263.5	343.7	402.1
50°	179.1	185.9	231.9	313.5	369.8
52.5°	162.6	168.1	203.1	283.4	338.2
55°	146.8	150.9	178.4	253.2	305.3
57.5°	133.1	135.2	156.4	223.0	269.6
60°	118.7	121.4	140.0	192.1	234.6
62.5°	107.0	108.4	125.6	162.6	199.7
65°	94.0	96.1	111.1	134.5	166.0
67.5°	82.3	85.8	96.1	109.8	131.0
70°	71.4	76.2	82.3	89.2	100.9
72.5°	61.1	66.6	70.0	72.7	70.7
75°	50.8	56.9	56.9	57.6	55.6
77.5°	41.2	46.7	46.0	45.3	42.5
80°	31.6	36.4	35.0	34.3	31.6
82.5°	23.3	26.8	25.4	24.7	21.3
85°	14.4	17.8	17.2	16.5	13.7
87.5°	6.9	10.3	9.6	8.9	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)