

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: P1060495

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060495
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D850-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

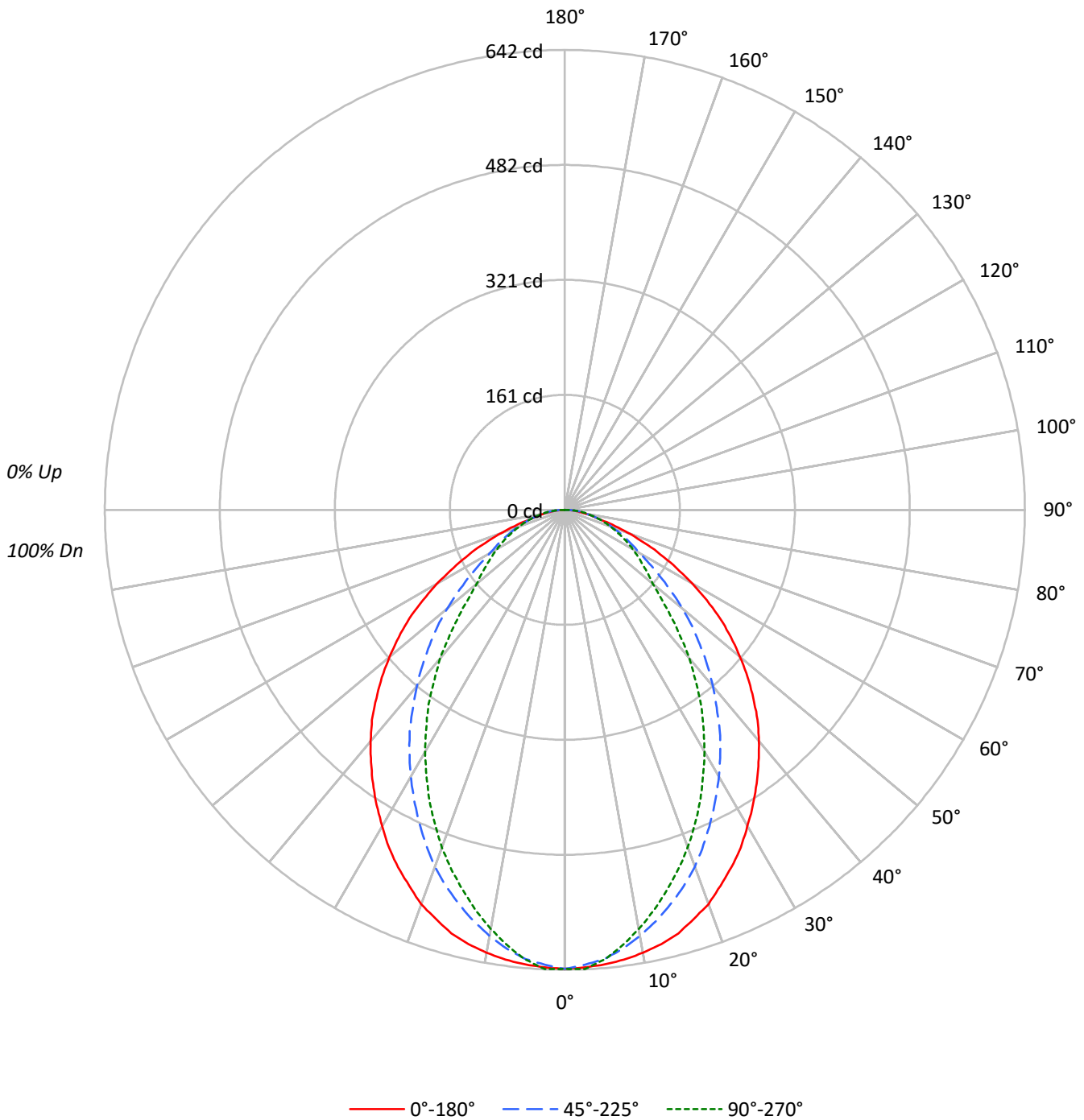
Lumens per Lamp: N/A
Luminaire Lumens: 1235.5 lumens
Efficiency: N/A
Efficacy: 63.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88				86	
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76				74	
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66				64	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58				56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52				50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46				44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42				40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38				36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35				33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32				30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5517	5517	5517
5°	5506	5441	5447
10°	5490	5280	5195
15°	5457	5081	4900
20°	5368	4858	4596
25°	5230	4571	4249
30°	5068	4275	3878
35°	4907	3965	3483
40°	4739	3614	3038
45°	4529	3245	2540
50°	4276	2864	2149
55°	3978	2431	1989
60°	3527	2062	1881
65°	3007	1903	1779
70°	2352	1762	1687
75°	1604	1627	1627
80°	1384	1532	1567
85°	1186	1492	1640

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4529 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	4.8
10°-20°	161.9	13.1
20°-30°	224.8	18.2
30°-40°	240.9	19.5
40°-50°	213.4	17.3
50°-60°	160.9	13.0
60°-70°	104.2	8.4
70°-80°	53.4	4.3
80°-90°	16.4	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°	446.3	36.1
0°-40°	687.2	55.6
0°-60°	1061.5	85.9
0°-90°	1235.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	637	638	629	630	630	61
15°	612	599	570	556	550	172
25°	550	521	481	456	447	253
35°	467	425	377	343	331	292
45°	372	324	266	225	209	287
55°	265	221	162	136	132	235
65°	148	119	93	88	87	146
75°	48	50	49	49	49	57
85°	12	13	15	17	17	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	640.7	640.7	640.7	640.7	640.7
2.5°	639.2	641.5	635.5	640.0	641.5
5°	637.0	637.7	629.4	630.2	630.2
7.5°	633.2	631.7	618.2	614.4	613.6
10°	627.9	623.4	603.8	596.3	594.1
12.5°	621.2	612.9	588.0	577.5	573.0
15°	612.1	598.6	570.0	555.7	549.6
17.5°	598.6	581.3	551.1	533.1	526.3
20°	585.8	562.4	530.1	507.5	501.5
22.5°	567.7	542.9	506.0	481.9	474.3
25°	550.4	521.0	481.1	455.5	447.2
27.5°	531.6	498.4	455.5	428.4	417.9
30°	509.7	474.3	429.9	401.3	390.0
32.5°	488.7	451.0	403.6	371.9	359.9
35°	466.8	424.7	377.2	343.3	331.3
37.5°	444.2	399.8	347.9	314.7	298.9
40°	421.6	375.0	321.5	283.9	270.3
42.5°	398.3	349.4	294.4	255.2	237.9
45°	371.9	323.8	266.5	225.1	208.6
47.5°	346.3	298.9	240.9	195.8	180.7
50°	319.2	272.6	213.8	170.2	160.4
52.5°	292.1	245.5	187.5	150.6	146.1
55°	265.0	220.6	161.9	136.3	132.5
57.5°	234.9	195.0	139.3	123.5	120.5
60°	204.8	167.2	119.7	111.4	109.2
62.5°	175.4	143.1	106.2	99.4	97.9
65°	147.6	119.0	93.4	88.1	87.3
67.5°	120.5	97.9	81.3	78.3	76.8
70°	93.4	78.3	70.0	68.5	67.0
72.5°	69.3	63.2	59.5	58.7	58.0
75°	48.2	50.4	48.9	48.9	48.9
77.5°	38.4	39.2	39.9	40.7	39.9
80°	27.9	30.1	30.9	32.4	31.6
82.5°	19.6	21.1	23.3	24.1	24.8
85°	12.0	12.8	15.1	16.6	16.6
87.5°	5.3	6.0	7.5	9.0	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)