

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: P1060486

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060486  
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-S575D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

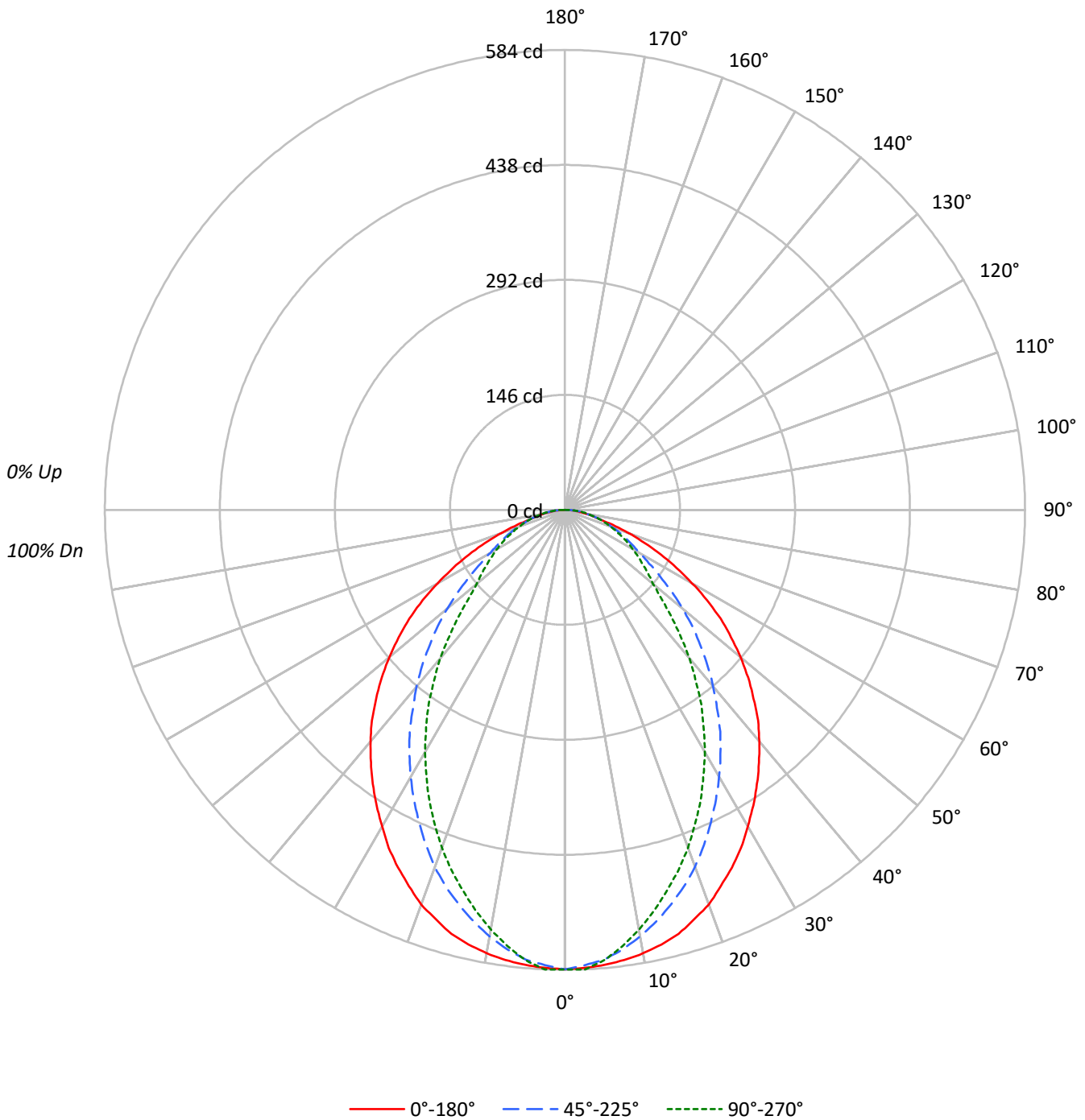
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1125.0 lumens  
Efficiency: N/A  
Efficacy: 57.4 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°	5025	5025	5025
5°	5014	4955	4961
10°	5000	4808	4730
15°	4969	4627	4462
20°	4888	4423	4184
25°	4762	4163	3870
30°	4616	3893	3532
35°	4469	3611	3172
40°	4315	3291	2766
45°	4125	2956	2313
50°	3894	2608	1956
55°	3623	2213	1812
60°	3212	1877	1712
65°	2738	1732	1620
70°	2140	1606	1536
75°	1461	1484	1484
80°	1260	1393	1428
85°	1087	1354	1492

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4125 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	4.8
10°-20°	147.4	13.1
20°-30°	204.7	18.2
30°-40°	219.4	19.5
40°-50°	194.4	17.3
50°-60°	146.5	13.0
60°-70°	94.8	8.4
70°-80°	48.7	4.3
80°-90°	14.9	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°	406.4	36.1
0°-40°	625.8	55.6
0°-60°	966.6	85.9
0°-90°	1125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1125.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	580	581	573	574	574	55
15°	557	545	519	506	500	157
25°	501	474	438	415	407	231
35°	425	387	344	313	302	266
45°	339	295	243	205	190	261
55°	241	201	147	124	121	214
65°	134	108	85	80	80	133
75°	44	46	45	45	45	52
85°	11	12	14	15	15	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	583.5	583.5	583.5	583.5	583.5
2.5°	582.1	584.2	578.7	582.8	584.2
5°	580.0	580.7	573.2	573.9	573.9
7.5°	576.6	575.2	562.9	559.5	558.8
10°	571.8	567.7	549.9	543.0	541.0
12.5°	565.6	558.1	535.5	525.9	521.8
15°	557.4	545.1	519.0	506.0	500.5
17.5°	545.1	529.3	501.9	485.4	479.3
20°	533.4	512.2	482.7	462.1	456.6
22.5°	517.0	494.3	460.7	438.8	431.9
25°	501.2	474.5	438.1	414.8	407.3
27.5°	484.1	453.9	414.8	390.1	380.5
30°	464.2	431.9	391.5	365.4	355.2
32.5°	445.0	410.7	367.5	338.7	327.7
35°	425.1	386.7	343.5	312.6	301.7
37.5°	404.5	364.1	316.8	286.6	272.2
40°	383.9	341.4	292.8	258.5	246.1
42.5°	362.7	318.1	268.1	232.4	216.7
45°	338.7	294.8	242.7	205.0	189.9
47.5°	315.4	272.2	219.4	178.3	164.5
50°	290.7	248.2	194.7	155.0	146.0
52.5°	266.0	223.5	170.7	137.1	133.0
55°	241.3	200.9	147.4	124.1	120.7
57.5°	213.9	177.6	126.8	112.4	109.7
60°	186.5	152.2	109.0	101.5	99.4
62.5°	159.8	130.3	96.7	90.5	89.1
65°	134.4	108.3	85.0	80.2	79.5
67.5°	109.7	89.1	74.0	71.3	69.9
70°	85.0	71.3	63.8	62.4	61.0
72.5°	63.1	57.6	54.2	53.5	52.8
75°	43.9	45.9	44.6	44.6	44.6
77.5°	35.0	35.7	36.3	37.0	36.3
80°	25.4	27.4	28.1	29.5	28.8
82.5°	17.8	19.2	21.3	21.9	22.6
85°	11.0	11.7	13.7	15.1	15.1
87.5°	4.8	5.5	6.9	8.2	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)