

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: P1060525

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

Issue Date: 8/7/2025

**Test Information**

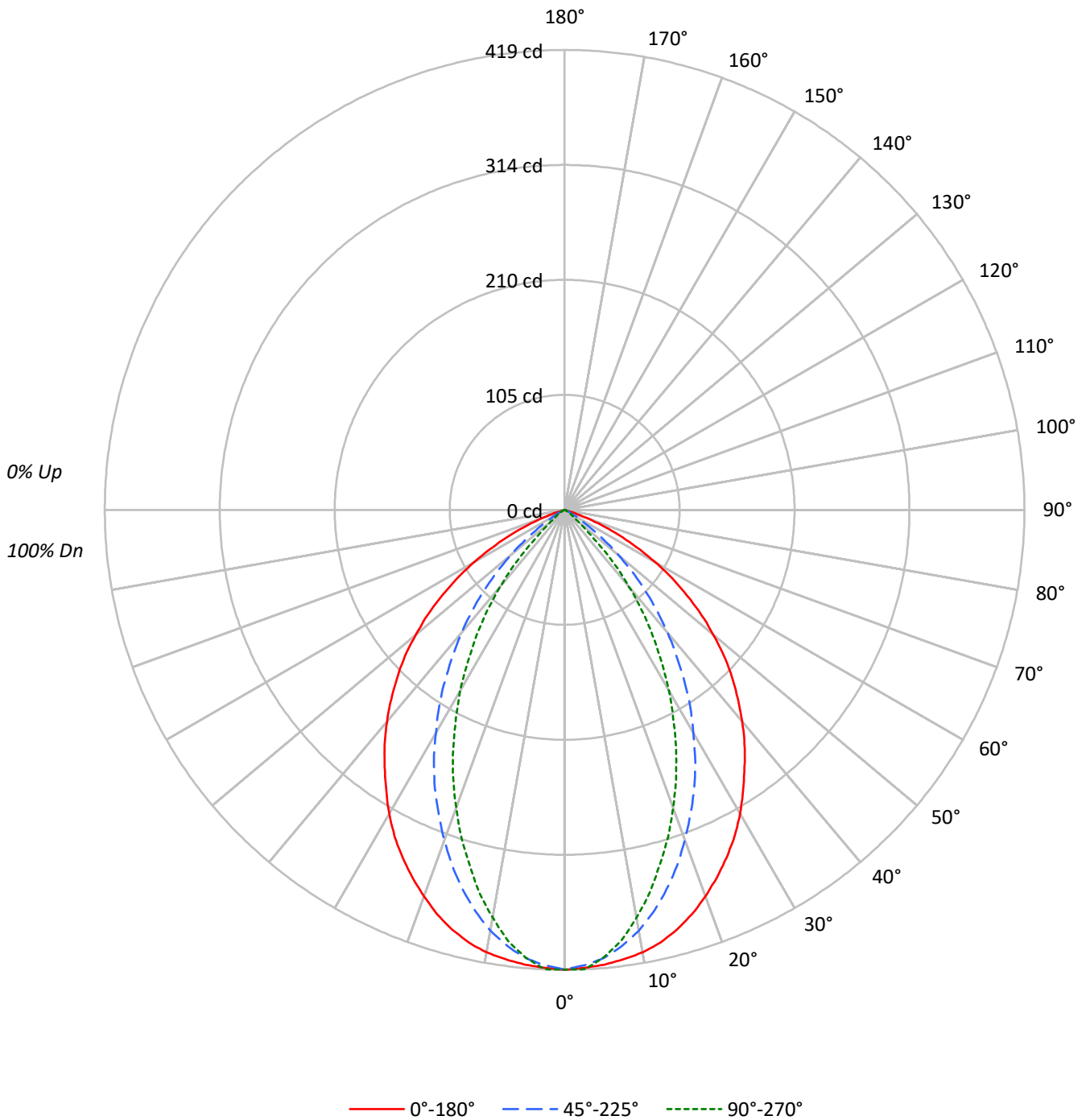
Test Method: LM-79-2019  
Report Number: P1060525  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D940-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK 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: 547.0 lumens  
Efficiency: N/A  
Efficacy: 27.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3607	3607	3607
5°	3595	3543	3538
10°	3579	3404	3298
15°	3529	3195	2985
20°	3434	2935	2646
25°	3319	2658	2283
30°	3179	2330	1890
35°	3004	1998	1470
40°	2830	1640	1027
45°	2624	1260	509
50°	2369	852	170
55°	2045	437	119
60°	1636	157	83
65°	1123	86	37
70°	504	45	30
75°	0	20	20
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2624 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.7	7.1
10°-20°	101.4	18.5
20°-30°	131.3	24.0
30°-40°	124.7	22.8
40°-50°	88.3	16.1
50°-60°	45.3	8.3
60°-70°	15.9	2.9
70°-80°	1.4	0.3
80°-90°	0.0	0.0
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°	271.4	49.6
0°-40°	396.1	72.4
0°-60°	529.8	96.9
0°-90°	547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	547.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	416	416	410	410	409	39
15°	396	384	358	341	335	111
25°	349	322	280	250	240	161
35°	286	244	190	153	140	179
45°	216	166	104	59	42	166
55°	136	90	29	8	8	122
65°	55	27	4	2	2	55
75°	0	1	1	1	1	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	418.9	418.9	418.9	418.9	418.9
2.5°	417.7	418.9	415.3	418.3	418.9
5°	415.9	416.5	409.9	409.9	409.3
7.5°	412.9	411.7	400.8	396.5	395.9
10°	409.3	405.0	389.3	380.2	377.2
12.5°	403.8	395.9	374.7	361.4	357.8
15°	395.9	383.8	358.4	341.4	334.8
17.5°	386.2	370.5	340.2	319.7	313.0
20°	374.7	354.8	320.3	297.3	288.8
22.5°	362.6	339.6	299.7	273.6	265.2
25°	349.3	322.1	279.7	250.0	240.3
27.5°	335.4	303.3	257.9	227.0	214.3
30°	319.7	284.5	234.3	202.2	190.1
32.5°	302.7	264.0	213.1	178.6	164.1
35°	285.8	244.0	190.1	153.2	139.8
37.5°	269.4	225.2	167.1	128.3	115.6
40°	251.8	204.6	145.9	105.9	91.4
42.5°	233.7	184.6	124.1	82.9	67.2
45°	215.5	165.9	103.5	59.3	41.8
47.5°	197.4	145.9	83.5	37.5	22.4
50°	176.8	126.5	63.6	20.0	12.7
52.5°	157.4	108.4	45.4	11.5	9.7
55°	136.2	89.6	29.1	8.5	7.9
57.5°	116.2	71.4	16.3	6.7	6.1
60°	95.0	55.1	9.1	5.4	4.8
62.5°	73.9	40.0	6.1	3.6	3.0
65°	55.1	26.6	4.2	2.4	1.8
67.5°	36.3	15.1	3.0	1.2	1.2
70°	20.0	7.3	1.8	1.2	1.2
72.5°	7.3	2.4	1.2	0.6	0.6
75°	0.0	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)