

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S124RDRP-S575D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S124RDRP-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

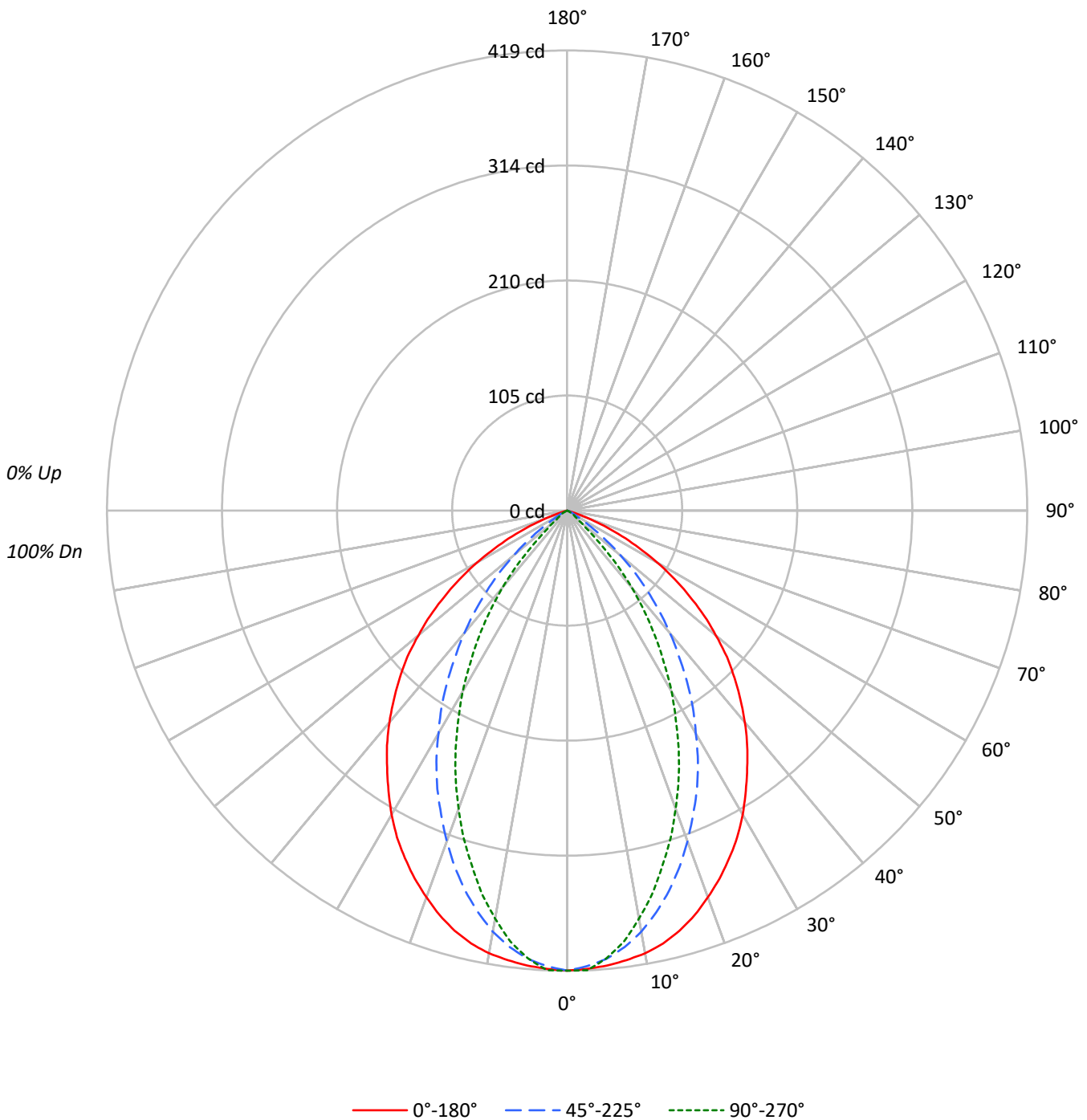
Lumens per Lamp: N/A
Luminaire Lumens: 547.0 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.98	14.24	13.35	14.55	14.87	0.00	0.00	0.00	0.00	0.00
	3H	13.26	14.37	13.64	14.70	15.06	0.00	0.00	0.00	0.00	0.00
	4H	13.18	14.21	13.59	14.56	14.95	0.00	0.00	0.00	0.00	0.00
	6H	13.10	14.04	13.51	14.41	14.80	0.00	0.00	0.00	0.00	0.00
	8H	13.05	13.94	13.48	14.33	14.74	0.00	0.00	0.00	0.00	0.00
	12H	13.01	13.85	13.44	14.24	14.67	0.00	0.00	0.00	0.00	0.00
4H	2H	12.76	13.78	13.16	14.13	14.52	0.00	0.00	0.00	0.00	0.00
	3H	13.04	13.87	13.45	14.27	14.68	0.00	0.00	0.00	0.00	0.00
	4H	12.95	13.68	13.38	14.10	14.55	0.00	0.00	0.00	0.00	0.00
	6H	12.86	13.49	13.33	13.94	14.41	0.00	0.00	0.00	0.00	0.00
	8H	12.80	13.39	13.27	13.84	14.31	0.00	0.00	0.00	0.00	0.00
	12H	12.75	13.26	13.24	13.75	14.22	0.00	0.00	0.00	0.00	0.00
8H	4H	12.80	13.39	13.27	13.84	14.31	0.00	0.00	0.00	0.00	0.00
	6H	12.69	13.17	13.20	13.67	14.15	0.00	0.00	0.00	0.00	0.00
	8H	12.62	13.05	13.15	13.57	14.06	0.00	0.00	0.00	0.00	0.00
	12H	12.57	12.95	13.09	13.45	14.02	0.00	0.00	0.00	0.00	0.00
12H	4H	12.75	13.26	13.24	13.75	14.22	0.00	0.00	0.00	0.00	0.00
	6H	12.62	13.05	13.15	13.57	14.06	0.00	0.00	0.00	0.00	0.00
	8H	12.57	12.95	13.09	13.45	14.02	0.00	0.00	0.00	0.00	0.00