

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: P1060363

Luminaire Tested: S124RDRP-S1195D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060363
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-S1195D940-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

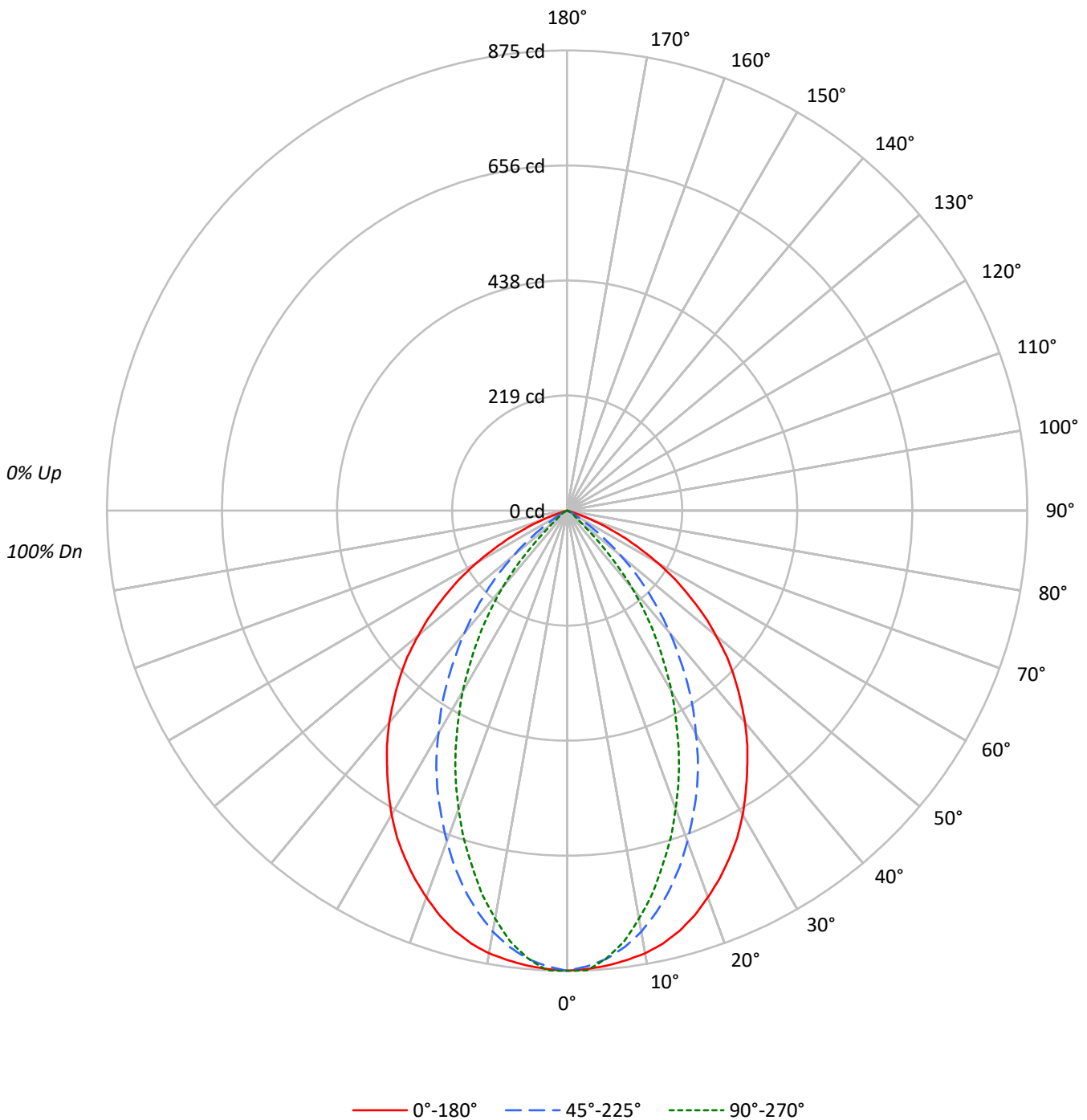
Lumens per Lamp: N/A
Luminaire Lumens: 1142.5 lumens
Efficiency: N/A
Efficacy: 27.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82					82			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66					66			
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42					42			
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7534	7534	7534
5°	7508	7399	7388
10°	7473	7109	6888
15°	7372	6673	6233
20°	7172	6129	5527
25°	6931	5550	4769
30°	6638	4865	3947
35°	6274	4173	3071
40°	5913	3425	2146
45°	5481	2633	1062
50°	4946	1779	356
55°	4271	911	246
60°	3419	327	174
65°	2345	181	77
70°	1050	96	63
75°	0	43	43
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5481 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	7.1
10°-20°	211.8	18.5
20°-30°	274.2	24.0
30°-40°	260.5	22.8
40°-50°	184.5	16.1
50°-60°	94.7	8.3
60°-70°	33.1	2.9
70°-80°	2.9	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°	566.8	49.6
0°-40°	827.3	72.4
0°-60°	1106.5	96.8
0°-90°	1142.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1142.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	875	875	875	875	875	
5°	869	870	856	856	855	82
15°	827	802	748	713	699	232
25°	730	673	584	522	502	335
35°	597	510	397	320	292	373
45°	450	346	216	124	87	346
55°	284	187	61	18	16	254
65°	115	56	9	5	4	114
75°	0	1	1	1	1	9
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°	874.9	874.9	874.9	874.9	874.9
2.5°	872.4	874.9	867.3	873.7	874.9
5°	868.6	869.9	856.0	856.0	854.7
7.5°	862.3	859.8	837.0	828.2	826.9
10°	854.7	845.9	813.0	794.0	787.7
12.5°	843.3	826.9	782.6	754.8	747.2
15°	826.9	801.6	748.5	713.1	699.2
17.5°	806.7	773.8	710.6	667.6	653.7
20°	782.6	740.9	668.8	620.8	603.1
22.5°	757.3	709.3	625.9	571.5	553.8
25°	729.5	672.6	584.1	522.2	501.9
27.5°	700.5	633.4	538.6	474.1	447.6
30°	667.6	594.2	489.3	422.3	397.0
32.5°	632.2	551.3	445.1	373.0	342.6
35°	596.8	509.5	397.0	319.9	292.1
37.5°	562.6	470.3	349.0	268.0	241.5
40°	526.0	427.4	304.7	221.3	190.9
42.5°	488.0	385.6	259.2	173.2	140.3
45°	450.1	346.4	216.2	123.9	87.2
47.5°	412.2	304.7	174.5	78.4	46.8
50°	369.2	264.3	132.8	41.7	26.6
52.5°	328.7	226.3	94.8	24.0	20.2
55°	284.5	187.1	60.7	17.7	16.4
57.5°	242.8	149.2	34.1	13.9	12.6
60°	198.5	115.1	19.0	11.4	10.1
62.5°	154.3	83.4	12.6	7.6	6.3
65°	115.1	55.6	8.9	5.1	3.8
67.5°	75.9	31.6	6.3	2.5	2.5
70°	41.7	15.2	3.8	2.5	2.5
72.5°	15.2	5.1	2.5	1.3	1.3
75°	0.0	1.3	1.3	1.3	1.3
77.5°	0.0	0.0	0.0	0.0	1.3
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	15.55	16.80	15.91	17.11	17.43	0.00	0.00	0.00	0.00	0.09
	3H	15.82	16.93	16.20	17.26	17.62	0.00	0.00	0.00	0.00	0.08
	4H	15.75	16.77	16.15	17.12	17.51	0.00	0.00	0.00	0.00	0.03
	6H	15.66	16.60	16.08	16.97	17.37	0.00	0.00	0.00	0.00	0.00
	8H	15.61	16.50	16.05	16.89	17.30	0.00	0.00	0.00	0.00	0.00
	12H	15.57	16.41	16.00	16.80	17.23	0.00	0.00	0.00	0.00	0.00
4H	2H	15.32	16.34	15.72	16.70	17.08	0.00	0.00	0.00	0.05	0.43
	3H	15.60	16.43	16.02	16.84	17.24	0.00	0.00	0.00	0.04	0.44
	4H	15.51	16.25	15.95	16.67	17.11	0.00	0.00	0.00	0.00	0.40
	6H	15.42	16.05	15.89	16.50	16.97	0.00	0.00	0.00	0.00	0.28
	8H	15.36	15.95	15.83	16.40	16.87	0.00	0.00	0.00	0.00	0.18
	12H	15.31	15.83	15.80	16.31	16.79	0.00	0.00	0.00	0.00	0.10
8H	4H	15.36	15.95	15.83	16.40	16.87	0.00	0.00	0.00	0.00	0.37
	6H	15.25	15.73	15.76	16.23	16.71	0.00	0.00	0.00	0.00	0.23
	8H	15.19	15.61	15.71	16.13	16.62	0.00	0.00	0.00	0.00	0.15
	12H	15.14	15.51	15.65	16.01	16.58	0.00	0.00	0.00	0.00	0.11
12H	4H	15.31	15.83	15.80	16.31	16.79	0.00	0.00	0.00	0.00	0.28
	6H	15.19	15.61	15.71	16.13	16.62	0.00	0.00	0.00	0.00	0.15
	8H	15.14	15.51	15.65	16.01	16.58	0.00	0.00	0.00	0.00	0.11