

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



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: P1058254

Luminaire Tested: S122RDR-H1005D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058254
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

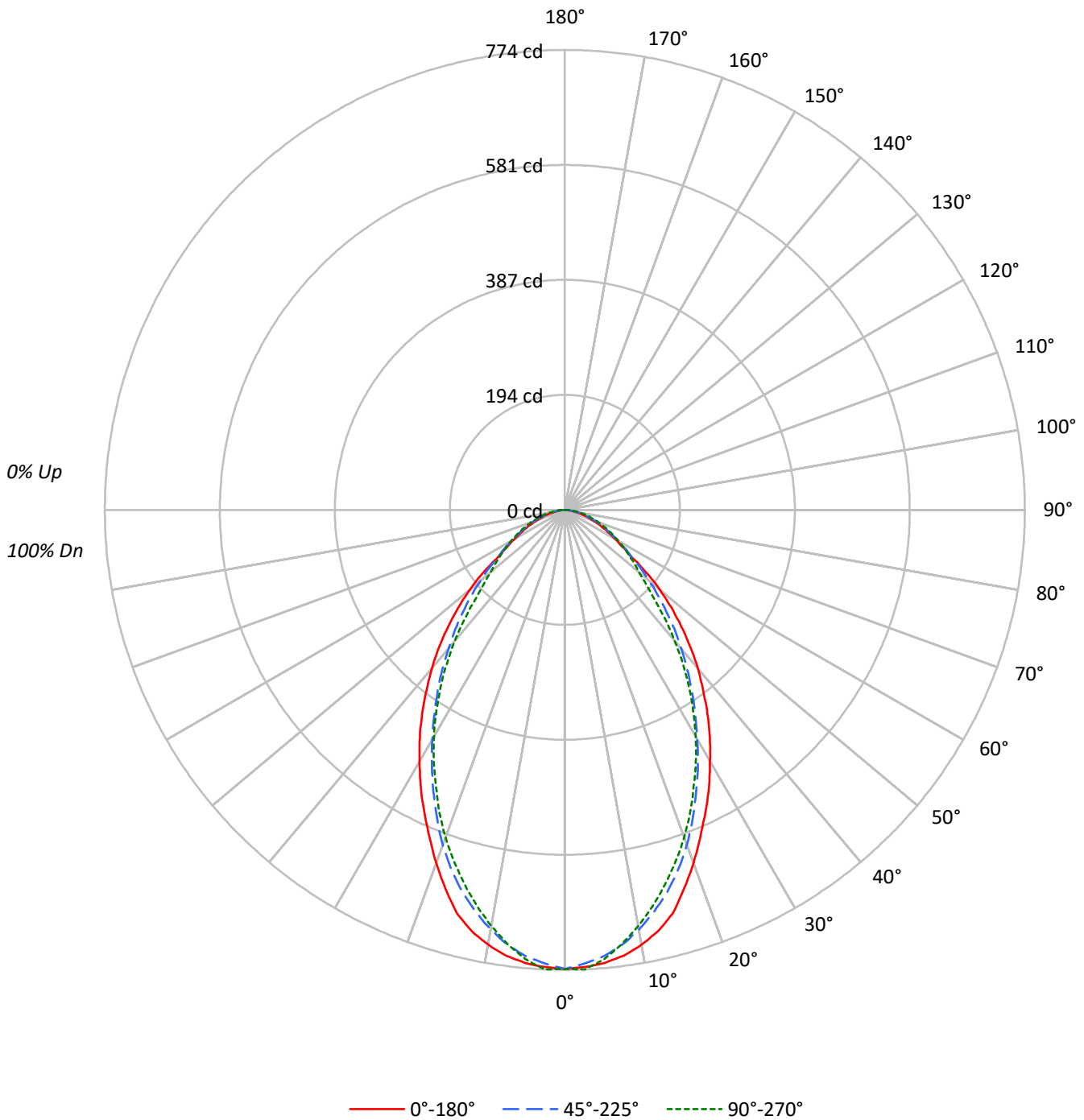
Lumens per Lamp: N/A
Luminaire Lumens: 1173.6 lumens
Efficiency: N/A
Efficacy: 32.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14260	14260	14260
5°	14177	13972	14063
10°	13925	13442	13326
15°	13422	12717	12459
20°	12420	11792	11525
25°	11400	10648	10447
30°	10409	9490	9386
35°	9425	8398	8204
40°	8387	7320	6935
45°	7226	6294	5556
50°	5971	5299	4662
55°	4314	4395	4195
60°	3587	3768	3816
65°	3061	3279	3493
70°	2525	2919	3189
75°	2103	2460	2895
80°	1573	1966	2614
85°	529	1037	2350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7226 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	6.1
10°-20°	188.1	16.0
20°-30°	243.5	20.7
30°-40°	238.8	20.3
40°-50°	188.0	16.0
50°-60°	123.2	10.5
60°-70°	75.0	6.4
70°-80°	37.5	3.2
80°-90°	8.1	0.7
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°	503.0	42.9
0°-40°	741.8	63.2
0°-60°	1053.0	89.7
0°-90°	1173.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1173.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	765	765	754	759	759	72
15°	703	693	666	657	652	196
25°	560	541	523	520	513	257
35°	418	395	373	372	364	261
45°	277	260	241	224	213	213
55°	134	142	137	132	130	127
65°	70	71	75	79	80	70
75°	30	31	34	39	41	31
85°	2	4	5	9	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	772.8	772.8	772.8	772.8	772.8
2.5°	770.3	771.5	764.1	771.5	774.0
5°	765.4	765.4	754.3	759.2	759.2
7.5°	756.8	755.5	738.3	738.3	737.1
10°	743.2	738.3	717.4	713.7	711.2
12.5°	726.0	717.4	692.8	686.6	682.9
15°	702.6	692.8	665.7	657.1	652.2
17.5°	668.2	658.3	634.9	625.1	620.2
20°	632.5	617.7	600.5	591.9	586.9
22.5°	595.6	578.3	562.3	556.2	551.3
25°	559.9	541.4	523.0	520.5	513.1
27.5°	525.4	503.3	484.8	483.6	477.4
30°	488.5	465.1	445.4	446.7	440.5
32.5°	454.1	431.9	408.5	409.8	402.4
35°	418.4	395.0	372.8	371.6	364.2
37.5°	381.5	359.3	338.4	333.5	326.1
40°	348.2	326.1	303.9	295.3	287.9
42.5°	312.5	292.9	273.2	259.6	249.8
45°	276.9	259.6	241.2	224.0	212.9
47.5°	242.4	228.9	212.9	192.0	184.6
50°	208.0	198.1	184.6	166.1	162.4
52.5°	172.3	168.6	160.0	147.7	146.4
55°	134.1	141.5	136.6	131.7	130.4
57.5°	113.2	114.4	118.1	116.9	116.9
60°	97.2	97.2	102.1	103.4	103.4
62.5°	82.4	83.7	88.6	91.1	91.1
65°	70.1	71.4	75.1	78.8	80.0
67.5°	57.8	60.3	64.0	67.7	68.9
70°	46.8	49.2	54.1	57.8	59.1
72.5°	38.1	39.4	44.3	48.0	49.2
75°	29.5	30.8	34.5	39.4	40.6
77.5°	20.9	23.4	27.1	30.8	33.2
80°	14.8	16.0	18.5	23.4	24.6
82.5°	8.6	9.8	12.3	16.0	17.2
85°	2.5	3.7	4.9	8.6	11.1
87.5°	0.0	0.0	0.0	2.5	4.9
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	15.35	16.75	15.72	17.06	17.38	15.53	16.93	15.90	17.24	17.56
	3H	16.49	17.73	16.87	18.06	18.42	16.99	18.24	17.37	18.57	18.93
	4H	16.84	18.00	17.24	18.35	18.73	17.54	18.70	17.94	19.05	19.43
	6H	17.02	18.09	17.44	18.46	18.86	17.95	19.02	18.36	19.39	19.78
	8H	17.05	18.07	17.48	18.46	18.86	18.08	19.09	18.50	19.48	19.89
	12H	17.03	18.01	17.47	18.39	18.82	18.16	19.13	18.59	19.51	19.94
4H	2H	15.81	16.98	16.21	17.33	17.71	15.96	17.12	16.36	17.47	17.86
	3H	17.15	18.11	17.56	18.51	18.91	17.63	18.59	18.05	18.99	19.40
	4H	17.60	18.45	18.03	18.87	19.31	18.30	19.16	18.73	19.58	20.02
	6H	17.87	18.61	18.33	19.06	19.52	18.83	19.58	19.29	20.02	20.49
	8H	17.91	18.61	18.38	19.05	19.52	19.00	19.70	19.47	20.14	20.61
	12H	17.91	18.52	18.39	19.00	19.48	19.12	19.74	19.61	20.22	20.69
8H	4H	17.81	18.50	18.28	18.95	19.42	18.45	19.14	18.91	19.59	20.06
	6H	18.16	18.73	18.66	19.22	19.70	19.08	19.65	19.58	20.14	20.62
	8H	18.24	18.75	18.75	19.26	19.75	19.31	19.82	19.83	20.34	20.83
	12H	18.25	18.70	18.76	19.20	19.76	19.50	19.95	20.01	20.44	21.01
12H	4H	17.82	18.44	18.31	18.92	19.39	18.43	19.05	18.92	19.53	20.00
	6H	18.18	18.69	18.70	19.21	19.70	19.07	19.58	19.59	20.10	20.59
	8H	18.30	18.75	18.81	19.24	19.81	19.35	19.80	19.86	20.29	20.86