

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: P1057827

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057827
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

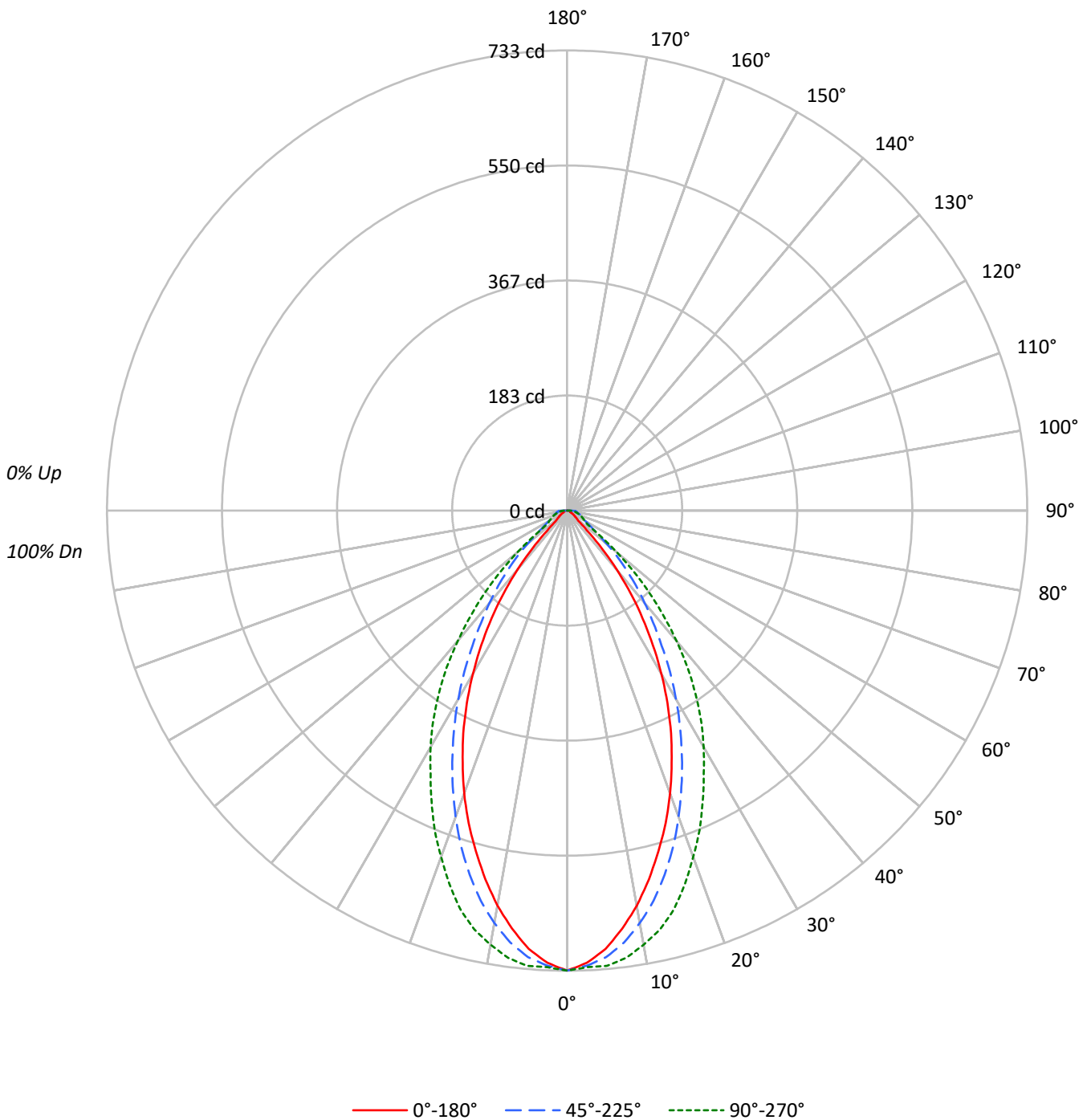
Lumens per Lamp: N/A
Luminaire Lumens: 797.5 lumens
Efficiency: N/A
Efficacy: 19.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92					90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83					81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75					74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69					67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63					61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58					56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54					52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50					48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46					45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43					42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13520	13520	13520
5°	12985	13224	13485
10°	11971	12498	13157
15°	10727	11466	12562
20°	9416	10197	11533
25°	7971	8808	10406
30°	6394	7394	9266
35°	4726	5915	8028
40°	2965	4632	6523
45°	1161	3486	4833
50°	571	2357	2963
55°	454	1547	1319
60°	347	1255	1210
65°	258	1179	1179
70°	318	1203	1203
75°	335	1340	1255
80°	499	1743	1371
85°	995	2985	1990

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5457 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	8.4
10°-20°	169.2	21.2
20°-30°	202.4	25.4
30°-40°	170.4	21.4
40°-50°	97.0	12.2
50°-60°	38.3	4.8
60°-70°	24.1	3.0
70°-80°	17.9	2.2
80°-90°	11.4	1.4
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°	438.5	55.0
0°-40°	608.8	76.3
0°-60°	744.1	93.3
0°-90°	797.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	797.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	701	716	714	722	728	65
15°	562	582	600	635	658	157
25°	392	409	433	477	511	178
35°	210	229	263	319	356	130
45°	44	78	134	168	185	42
55°	14	30	48	49	41	13
65°	6	27	27	26	27	7
75°	5	19	19	18	18	5
85°	5	13	14	13	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.7	732.7	732.7	732.7	732.7
2.5°	721.0	733.8	725.6	726.8	728.0
5°	701.0	716.3	713.9	722.1	728.0
7.5°	671.7	688.1	694.0	708.1	718.6
10°	638.9	657.6	667.0	689.3	702.2
12.5°	601.4	622.5	636.5	664.7	683.4
15°	561.5	581.5	600.2	635.4	657.6
17.5°	521.7	541.6	561.5	600.2	623.7
20°	479.5	498.2	519.3	560.4	587.3
22.5°	434.9	454.8	475.9	518.1	551.0
25°	391.5	409.1	432.6	477.1	511.1
27.5°	345.8	363.4	389.2	434.9	471.3
30°	300.1	317.7	347.0	393.9	434.9
32.5°	254.4	273.1	304.8	356.4	397.4
35°	209.8	228.6	262.6	318.9	356.4
37.5°	166.5	187.6	225.1	280.2	315.3
40°	123.1	147.7	192.3	241.5	270.8
42.5°	82.1	112.5	161.8	202.8	227.4
45°	44.5	78.5	133.6	167.6	185.2
47.5°	24.6	50.4	106.7	133.6	144.2
50°	19.9	35.2	82.1	102.0	103.2
52.5°	16.4	31.7	61.0	72.7	66.8
55°	14.1	30.5	48.1	49.2	41.0
57.5°	11.7	29.3	39.9	35.2	35.2
60°	9.4	29.3	34.0	31.7	32.8
62.5°	7.0	29.3	30.5	28.1	29.3
65°	5.9	27.0	27.0	25.8	27.0
67.5°	5.9	24.6	24.6	23.4	24.6
70°	5.9	23.4	22.3	22.3	22.3
72.5°	4.7	21.1	21.1	19.9	19.9
75°	4.7	18.8	18.8	17.6	17.6
77.5°	4.7	17.6	17.6	16.4	15.2
80°	4.7	15.2	16.4	15.2	12.9
82.5°	4.7	14.1	15.2	14.1	10.6
85°	4.7	12.9	14.1	12.9	9.4
87.5°	3.5	12.9	12.9	10.6	7.0
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	6.74	7.96	7.10	8.27	8.59	8.77	9.99	9.13	10.30	10.62
	3H	8.28	9.37	8.66	9.70	10.06	10.74	11.82	11.12	12.16	12.52
	4H	8.84	9.85	9.24	10.20	10.59	11.65	12.67	12.06	13.02	13.40
	6H	9.40	10.33	9.81	10.70	11.09	12.53	13.46	12.95	13.84	14.23
	8H	9.69	10.57	10.12	10.96	11.37	12.94	13.82	13.37	14.21	14.62
	12H	10.05	10.90	10.49	11.28	11.71	13.38	14.23	13.82	14.61	15.04
4H	2H	7.93	8.94	8.33	9.29	9.67	9.39	10.40	9.79	10.75	11.14
	3H	10.13	10.96	10.54	11.36	11.77	11.63	12.47	12.05	12.87	13.27
	4H	11.18	11.93	11.62	12.35	12.80	12.70	13.45	13.14	13.87	14.32
	6H	12.08	12.72	12.54	13.17	13.64	13.81	14.46	14.27	14.90	15.37
	8H	12.46	13.07	12.93	13.52	13.99	14.34	14.94	14.81	15.39	15.86
	12H	12.89	13.42	13.37	13.90	14.38	14.91	15.45	15.40	15.93	16.41
8H	4H	11.98	12.59	12.46	13.04	13.51	13.19	13.80	13.67	14.25	14.72
	6H	13.36	13.86	13.87	14.36	14.84	14.59	15.08	15.09	15.58	16.06
	8H	14.08	14.53	14.61	15.05	15.54	15.33	15.78	15.85	16.29	16.79
	12H	14.84	15.23	15.35	15.73	16.30	16.16	16.56	16.68	17.05	17.63
12H	4H	12.15	12.68	12.63	13.17	13.64	13.30	13.83	13.78	14.31	14.79
	6H	13.69	14.14	14.22	14.66	15.15	14.80	15.25	15.33	15.77	16.26
	8H	14.61	15.00	15.13	15.50	16.07	15.69	16.09	16.21	16.58	17.16