

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: P1058181

Luminaire Tested: S122RDRP-S865D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058181
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D940-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

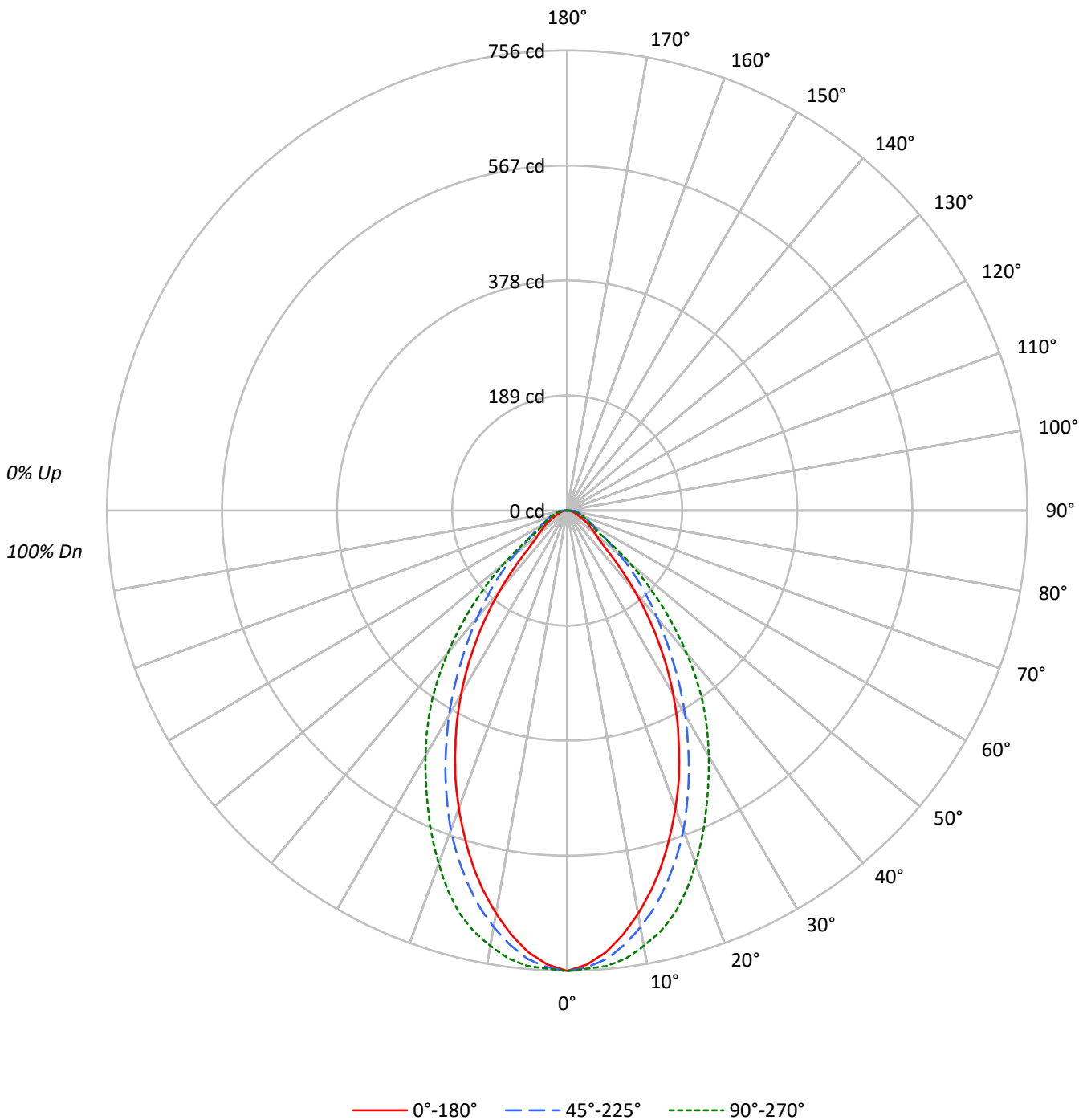
Lumens per Lamp: N/A
Luminaire Lumens: 917.7 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13959	13959	13959
5°	13492	13701	13909
10°	12595	13017	13607
15°	11489	12091	13078
20°	10221	10971	12118
25°	8857	9636	11009
30°	7426	8263	9916
35°	5850	6837	8788
40°	4170	5523	7337
45°	2463	4371	5691
50°	1774	3164	3873
55°	1483	2278	1953
60°	1203	1827	1661
65°	982	1620	1519
70°	847	1575	1457
75°	799	1604	1440
80°	839	1913	1551
85°	1186	3091	1905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5691 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	7.6
10°-20°	178.3	19.4
20°-30°	219.9	24.0
30°-40°	195.6	21.3
40°-50°	124.9	13.6
50°-60°	60.0	6.5
60°-70°	35.2	3.8
70°-80°	22.5	2.4
80°-90°	12.0	1.3
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°	467.6	51.0
0°-40°	663.2	72.3
0°-60°	848.0	92.4
0°-90°	917.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	917.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	728	742	740	744	751	68
15°	601	616	633	662	685	168
25°	435	452	473	507	541	199
35°	260	280	304	350	390	161
45°	94	122	168	194	218	79
55°	46	60	71	69	61	42
65°	22	40	37	34	35	23
75°	11	25	22	21	20	12
85°	6	14	15	12	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	756.5	756.5	756.5	756.5	756.5
2.5°	746.4	758.8	750.9	750.9	753.2
5°	728.4	741.9	739.7	744.2	750.9
7.5°	702.6	717.2	719.4	731.8	741.9
10°	672.2	688.0	694.7	712.7	726.2
12.5°	638.5	654.2	666.6	689.1	708.2
15°	601.4	616.0	632.9	662.1	684.6
17.5°	560.9	580.0	596.9	627.3	653.1
20°	520.5	538.5	558.7	587.9	617.1
22.5°	478.9	495.7	516.0	546.3	580.0
25°	435.0	451.9	473.3	507.0	540.7
27.5°	392.3	409.2	429.4	466.5	502.5
30°	348.5	365.3	387.8	426.0	465.4
32.5°	304.6	322.6	345.1	386.7	428.3
35°	259.7	279.9	303.5	349.6	390.1
37.5°	215.8	236.1	265.3	310.3	348.5
40°	173.1	196.7	229.3	269.8	304.6
42.5°	131.5	157.4	197.8	230.4	260.8
45°	94.4	122.5	167.5	194.5	218.1
47.5°	71.9	92.2	138.3	159.6	176.5
50°	61.8	74.2	110.2	125.9	134.9
52.5°	54.0	65.2	87.7	95.6	95.6
55°	46.1	59.6	70.8	68.6	60.7
57.5°	39.3	54.0	58.5	49.5	51.7
60°	32.6	49.5	49.5	43.8	45.0
62.5°	27.0	46.1	42.7	38.2	39.3
65°	22.5	40.5	37.1	33.7	34.8
67.5°	18.0	36.0	32.6	30.4	30.4
70°	15.7	32.6	29.2	27.0	27.0
72.5°	13.5	28.1	25.9	23.6	23.6
75°	11.2	24.7	22.5	21.4	20.2
77.5°	10.1	21.4	20.2	18.0	16.9
80°	7.9	18.0	18.0	16.9	14.6
82.5°	6.7	15.7	15.7	14.6	12.4
85°	5.6	13.5	14.6	12.4	9.0
87.5°	4.5	12.4	12.4	10.1	6.7
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	10.83	12.11	11.20	12.42	12.74	10.62	11.90	10.99	12.21	12.53
	3H	12.07	13.20	12.45	13.53	13.90	12.22	13.35	12.60	13.68	14.05
	4H	12.52	13.57	12.92	13.93	14.31	12.93	13.99	13.34	14.34	14.73
	6H	12.90	13.87	13.31	14.24	14.64	13.59	14.56	14.00	14.93	15.33
	8H	13.05	13.97	13.48	14.36	14.77	13.92	14.84	14.35	15.23	15.63
	12H	13.21	14.09	13.64	14.47	14.90	14.21	15.10	14.65	15.48	15.91
4H	2H	11.38	12.44	11.79	12.79	13.18	11.22	12.28	11.62	12.63	13.01
	3H	13.08	13.95	13.49	14.35	14.76	13.05	13.93	13.47	14.33	14.73
	4H	13.87	14.65	14.30	15.07	15.51	13.93	14.71	14.36	15.13	15.57
	6H	14.51	15.19	14.98	15.64	16.11	14.77	15.45	15.24	15.90	16.36
	8H	14.76	15.40	15.23	15.84	16.31	15.20	15.83	15.67	16.28	16.75
	12H	15.01	15.57	15.49	16.05	16.52	15.60	16.16	16.09	16.64	17.12
8H	4H	14.29	14.92	14.76	15.37	15.84	14.35	14.98	14.81	15.43	15.90
	6H	15.27	15.79	15.77	16.28	16.76	15.43	15.95	15.93	16.45	16.93
	8H	15.76	16.22	16.28	16.74	17.23	16.02	16.49	16.55	17.01	17.50
	12H	16.26	16.67	16.77	17.16	17.74	16.63	17.04	17.14	17.53	18.11
12H	4H	14.35	14.91	14.84	15.40	15.87	14.42	14.98	14.91	15.46	15.94
	6H	15.43	15.90	15.96	16.42	16.91	15.60	16.06	16.12	16.58	17.07
	8H	16.07	16.48	16.58	16.98	17.55	16.31	16.72	16.82	17.22	17.79