

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: P1058183

Luminaire Tested: S122RDRP-S865D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

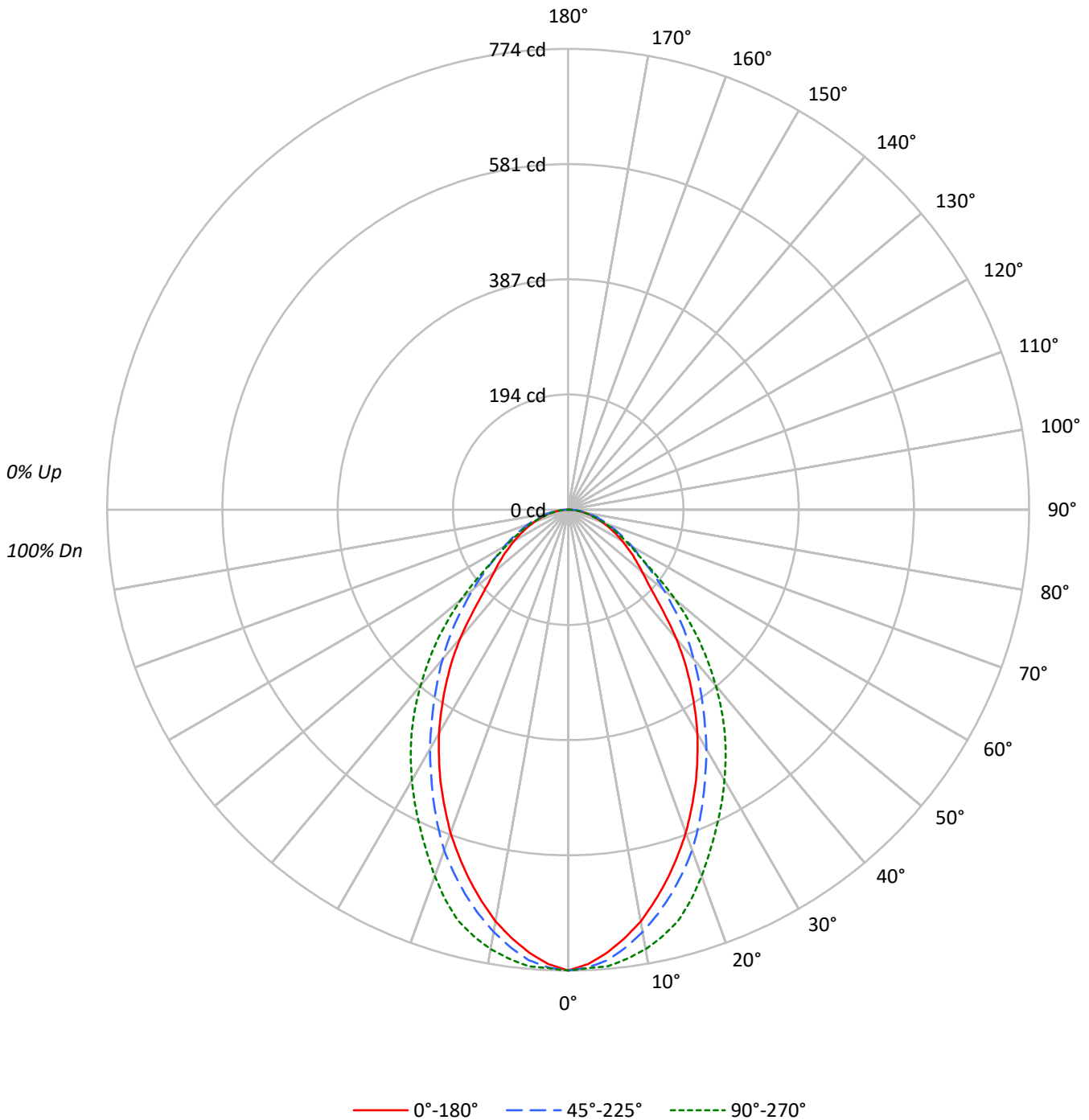
Lumens per Lamp: N/A
Luminaire Lumens: 1260.3 lumens
Efficiency: N/A
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14282	14282	14282
5°	13837	14066	14253
10°	13155	13493	14040
15°	12276	12769	13649
20°	11338	11957	12860
25°	10314	10909	11984
30°	9239	9884	11178
35°	8046	8833	10324
40°	6793	7901	9281
45°	5394	6978	8121
50°	4645	5997	6740
55°	4227	5131	5167
60°	3857	4561	4395
65°	3532	4122	3873
70°	3275	3820	3453
75°	3044	3608	3044
80°	2869	3464	2742
85°	2858	3578	2371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8121 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	5.7
10°-20°	188.9	15.0
20°-30°	248.6	19.7
30°-40°	249.9	19.8
40°-50°	202.6	16.1
50°-60°	139.5	11.1
60°-70°	91.3	7.2
70°-80°	50.9	4.0
80°-90°	17.2	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°	508.9	40.4
0°-40°	758.8	60.2
0°-60°	1100.9	87.4
0°-90°	1260.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	747	762	759	763	770	70
15°	643	658	668	693	714	180
25°	507	520	536	559	589	232
35°	357	374	392	427	458	223
45°	207	230	267	291	311	163
55°	131	146	160	163	161	118
65°	81	97	94	90	89	81
75°	43	53	51	45	43	46
85°	14	18	17	15	11	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	774.0	774.0	774.0	774.0	774.0
2.5°	763.9	777.4	769.5	769.5	770.6
5°	747.0	761.6	759.4	762.8	769.5
7.5°	725.7	741.4	741.4	751.5	760.5
10°	702.1	717.8	720.1	735.8	749.3
12.5°	672.9	688.6	695.4	715.6	733.6
15°	642.6	658.3	668.4	693.1	714.5
17.5°	610.0	625.7	639.2	665.0	686.4
20°	577.4	592.0	608.9	631.3	654.9
22.5°	541.5	557.2	572.9	594.3	621.2
25°	506.6	520.1	535.8	559.4	588.6
27.5°	469.6	484.2	498.8	526.9	557.2
30°	433.6	448.2	463.9	493.2	524.6
32.5°	395.4	411.1	426.9	459.5	492.0
35°	357.2	374.1	392.1	426.9	458.3
37.5°	320.2	338.1	359.5	395.4	422.4
40°	282.0	301.1	328.0	359.5	385.3
42.5°	241.5	265.1	297.7	324.7	348.2
45°	206.7	230.3	267.4	290.9	311.2
47.5°	180.9	200.0	235.9	256.1	273.0
50°	161.8	176.4	208.9	223.5	234.8
52.5°	146.0	160.6	183.1	193.2	196.6
55°	131.4	146.0	159.5	162.9	160.6
57.5°	116.8	132.6	140.4	137.0	137.0
60°	104.5	121.3	123.6	119.1	119.1
62.5°	92.1	109.0	109.0	103.3	103.3
65°	80.9	96.6	94.4	89.9	88.7
67.5°	70.8	85.4	82.0	77.5	76.4
70°	60.7	74.1	70.8	65.2	64.0
72.5°	51.7	64.0	59.5	55.0	52.8
75°	42.7	52.8	50.6	44.9	42.7
77.5°	34.8	42.7	40.4	35.9	33.7
80°	27.0	33.7	32.6	28.1	25.8
82.5°	20.2	25.8	24.7	21.3	18.0
85°	13.5	18.0	16.9	14.6	11.2
87.5°	6.7	12.4	11.2	10.1	5.6
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	15.97	17.41	16.33	17.72	18.04	16.32	17.77	16.69	18.08	18.39
	3H	17.51	18.80	17.89	19.13	19.49	17.67	18.96	18.05	19.29	19.65
	4H	18.08	19.29	18.49	19.64	20.02	18.15	19.36	18.56	19.71	20.09
	6H	18.51	19.63	18.93	20.00	20.39	18.51	19.62	18.92	19.99	20.38
	8H	18.67	19.73	19.10	20.12	20.52	18.62	19.68	19.05	20.07	20.48
	12H	18.78	19.80	19.21	20.18	20.61	18.70	19.71	19.13	20.10	20.53
4H	2H	16.56	17.76	16.96	18.11	18.49	16.84	18.05	17.24	18.40	18.78
	3H	18.38	19.38	18.79	19.78	20.18	18.41	19.42	18.83	19.82	20.22
	4H	19.12	20.02	19.56	20.44	20.88	19.02	19.92	19.45	20.34	20.78
	6H	19.71	20.49	20.17	20.94	21.40	19.50	20.28	19.96	20.73	21.19
	8H	19.92	20.65	20.39	21.10	21.57	19.66	20.39	20.13	20.84	21.31
	12H	20.09	20.74	20.57	21.22	21.69	19.78	20.44	20.27	20.92	21.39
8H	4H	19.41	20.14	19.87	20.58	21.05	19.32	20.05	19.78	20.50	20.96
	6H	20.16	20.77	20.66	21.26	21.74	19.94	20.54	20.44	21.03	21.51
	8H	20.49	21.03	21.00	21.54	22.03	20.19	20.73	20.70	21.24	21.73
	12H	20.77	21.25	21.28	21.75	22.31	20.40	20.88	20.91	21.37	21.94
12H	4H	19.43	20.08	19.91	20.56	21.03	19.35	20.01	19.84	20.49	20.96
	6H	20.22	20.77	20.74	21.28	21.77	20.01	20.56	20.53	21.07	21.56
	8H	20.62	21.10	21.13	21.59	22.16	20.33	20.81	20.84	21.30	21.87