

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: P1058120

Luminaire Tested: S122RDRP-S865D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058120
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-S865D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

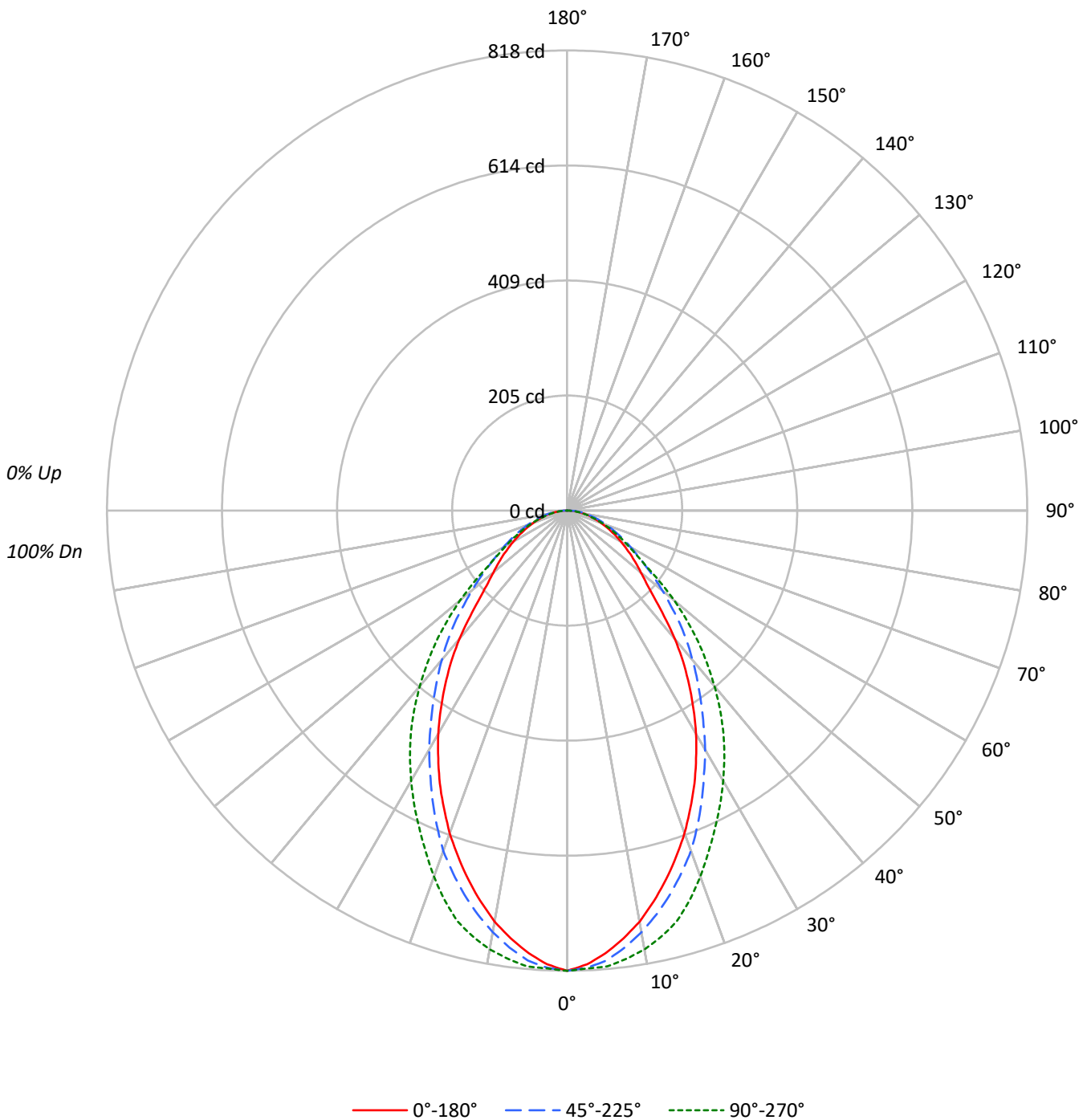
Lumens per Lamp: N/A
Luminaire Lumens: 1332.2 lumens
Efficiency: N/A
Efficacy: 38.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	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°	15096	15096	15096
5°	14626	14868	15067
10°	13905	14261	14840
15°	12975	13497	14427
20°	11984	12638	13594
25°	10903	11532	12668
30°	9765	10449	11815
35°	8506	9335	10914
40°	7178	8351	9811
45°	5702	7375	8583
50°	4909	6341	7125
55°	4469	5424	5463
60°	4074	4820	4646
65°	3733	4353	4096
70°	3458	4036	3653
75°	3215	3807	3215
80°	3029	3655	2901
85°	3006	3769	2519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8583 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	5.7
10°-20°	199.7	15.0
20°-30°	262.7	19.7
30°-40°	264.2	19.8
40°-50°	214.1	16.1
50°-60°	147.5	11.1
60°-70°	96.5	7.2
70°-80°	53.8	4.0
80°-90°	18.2	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°	537.9	40.4
0°-40°	802.1	60.2
0°-60°	1163.7	87.4
0°-90°	1332.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1332.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	790	805	803	806	813	74
15°	679	696	706	733	755	190
25°	536	550	566	591	622	245
35°	378	395	414	451	484	236
45°	218	243	283	308	329	173
55°	139	154	169	172	170	125
65°	86	102	100	95	94	85
75°	45	56	53	48	45	48
85°	14	19	18	15	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.1	818.1	818.1	818.1	818.1
2.5°	807.4	821.7	813.4	813.4	814.6
5°	789.6	805.1	802.7	806.2	813.4
7.5°	767.1	783.7	783.7	794.4	803.9
10°	742.1	758.7	761.1	777.7	792.0
12.5°	711.2	727.9	735.0	756.4	775.4
15°	679.2	695.8	706.5	732.6	755.2
17.5°	644.8	661.4	675.6	702.9	725.5
20°	610.3	625.8	643.6	667.3	692.3
22.5°	572.3	588.9	605.6	628.1	656.6
25°	535.5	549.8	566.4	591.3	622.2
27.5°	496.3	511.8	527.2	556.9	588.9
30°	458.3	473.8	490.4	521.3	554.5
32.5°	418.0	434.6	451.2	485.6	520.1
35°	377.6	395.4	414.4	451.2	484.5
37.5°	338.4	357.4	380.0	418.0	446.5
40°	298.0	318.2	346.7	380.0	407.3
42.5°	255.3	280.2	314.7	343.2	368.1
45°	218.5	243.4	282.6	307.5	328.9
47.5°	191.2	211.4	249.4	270.7	288.5
50°	171.0	186.4	220.9	236.3	248.2
52.5°	154.4	169.8	193.5	204.2	207.8
55°	138.9	154.4	168.6	172.2	169.8
57.5°	123.5	140.1	148.4	144.9	144.9
60°	110.4	128.2	130.6	125.9	125.9
62.5°	97.4	115.2	115.2	109.2	109.2
65°	85.5	102.1	99.7	95.0	93.8
67.5°	74.8	90.2	86.7	81.9	80.7
70°	64.1	78.4	74.8	68.9	67.7
72.5°	54.6	67.7	62.9	58.2	55.8
75°	45.1	55.8	53.4	47.5	45.1
77.5°	36.8	45.1	42.7	38.0	35.6
80°	28.5	35.6	34.4	29.7	27.3
82.5°	21.4	27.3	26.1	22.6	19.0
85°	14.2	19.0	17.8	15.4	11.9
87.5°	7.1	13.1	11.9	10.7	5.9
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	16.16	17.60	16.52	17.91	18.23	16.52	17.96	16.89	18.28	18.59
	3H	17.70	18.99	18.08	19.32	19.69	17.87	19.16	18.25	19.49	19.85
	4H	18.27	19.48	18.68	19.83	20.21	18.35	19.56	18.75	19.91	20.29
	6H	18.71	19.82	19.12	20.19	20.58	18.70	19.82	19.12	20.19	20.58
	8H	18.86	19.92	19.29	20.31	20.71	18.82	19.88	19.25	20.27	20.67
	12H	18.97	19.99	19.41	20.37	20.80	18.89	19.91	19.33	20.29	20.72
4H	2H	16.75	17.95	17.15	18.30	18.68	17.04	18.24	17.44	18.59	18.97
	3H	18.57	19.57	18.98	19.97	20.37	18.61	19.61	19.02	20.01	20.41
	4H	19.31	20.22	19.75	20.63	21.07	19.21	20.11	19.65	20.53	20.97
	6H	19.90	20.68	20.36	21.13	21.59	19.69	20.48	20.15	20.92	21.38
	8H	20.11	20.84	20.58	21.29	21.76	19.86	20.59	20.32	21.03	21.50
	12H	20.28	20.93	20.76	21.41	21.88	19.98	20.63	20.46	21.11	21.58
8H	4H	19.60	20.33	20.06	20.78	21.24	19.51	20.24	19.98	20.69	21.16
	6H	20.36	20.96	20.85	21.45	21.93	20.13	20.73	20.63	21.23	21.71
	8H	20.68	21.22	21.20	21.73	22.22	20.38	20.92	20.90	21.43	21.92
	12H	20.96	21.44	21.47	21.94	22.50	20.59	21.07	21.10	21.56	22.13
12H	4H	19.62	20.27	20.10	20.75	21.22	19.55	20.20	20.03	20.68	21.15
	6H	20.41	20.96	20.93	21.47	21.96	20.21	20.75	20.72	21.26	21.75
	8H	20.81	21.29	21.32	21.79	22.35	20.53	21.01	21.04	21.50	22.07