

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: P1059145

Luminaire Tested: S123RDRP-S1165D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059145
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

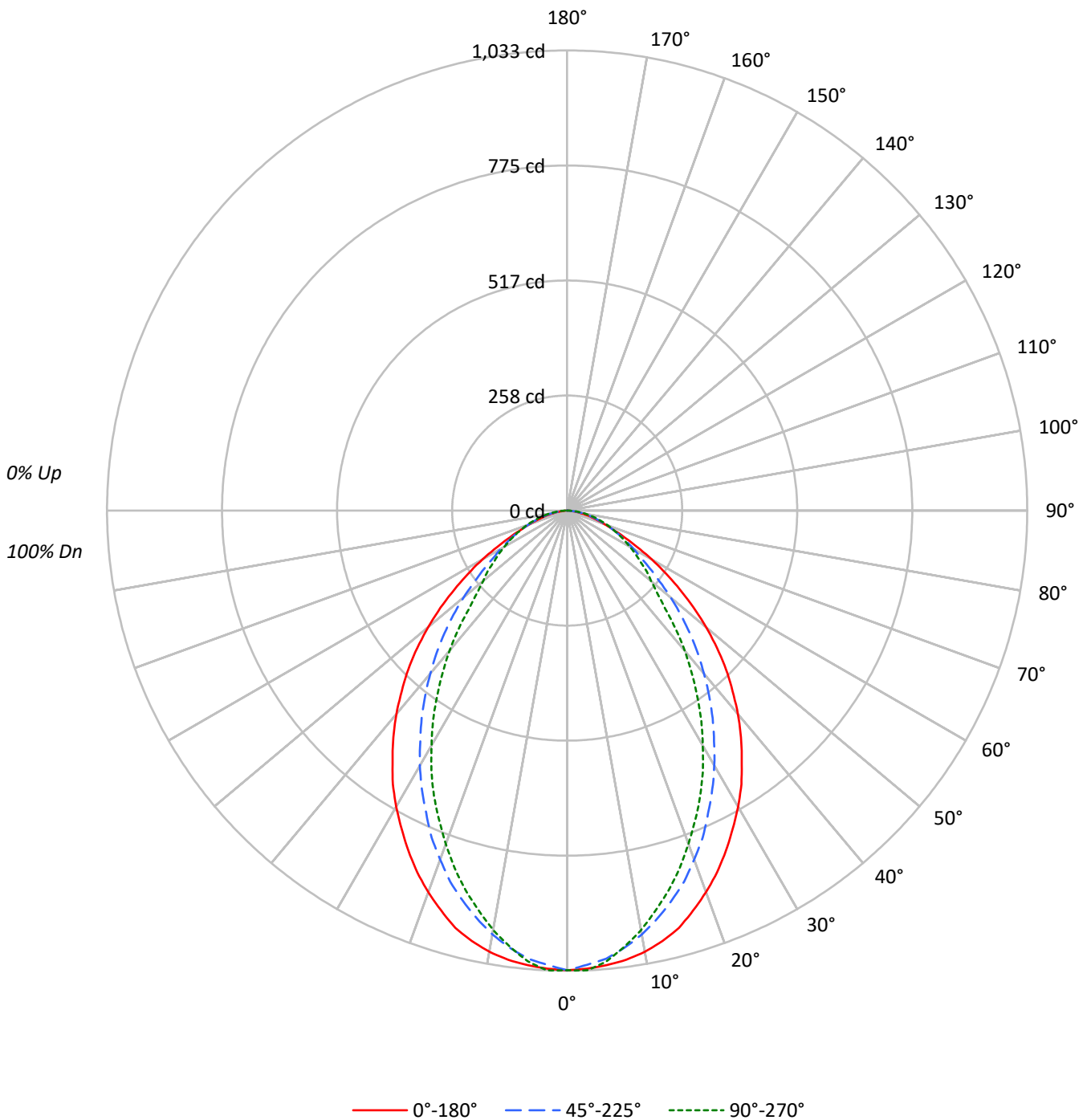
Lumens per Lamp: N/A
Luminaire Lumens: 1804.7 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12116	12116	12116
5°	12075	11899	11972
10°	11993	11519	11401
15°	11790	11021	10720
20°	11390	10414	9949
25°	10926	9706	9159
30°	10409	8962	8256
35°	9795	8159	7306
40°	9144	7319	6292
45°	8381	6466	5170
50°	7431	5550	4487
55°	6322	4645	4113
60°	5155	4049	3816
65°	3929	3584	3548
70°	3066	3193	3320
75°	2477	2867	3094
80°	1846	2346	2854
85°	997	1509	2506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8381 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.8	5.3
10°-20°	257.7	14.3
20°-30°	350.3	19.4
30°-40°	363.1	20.1
40°-50°	306.3	17.0
50°-60°	217.4	12.0
60°-70°	132.9	7.4
70°-80°	66.1	3.7
80°-90°	15.0	0.8
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°	703.8	39.0
0°-40°	1066.9	59.1
0°-60°	1590.7	88.1
0°-90°	1804.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1804.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1032	1032	1032	1032	1032	
5°	1024	1024	1010	1016	1016	97
15°	970	951	907	890	882	272
25°	843	806	749	722	707	388
35°	683	631	569	530	510	427
45°	505	451	389	336	311	388
55°	309	277	227	207	201	277
65°	141	136	129	129	128	144
75°	55	58	63	66	68	59
85°	7	9	11	16	19	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1031.8	1031.8	1031.8	1031.8	1031.8
2.5°	1029.3	1030.6	1020.7	1031.8	1033.1
5°	1024.4	1024.4	1009.5	1015.7	1015.7
7.5°	1016.9	1014.5	989.7	989.7	987.2
10°	1005.8	998.3	966.1	959.9	956.2
12.5°	989.7	977.2	937.6	926.4	919.0
15°	969.8	951.2	906.6	890.4	881.8
17.5°	941.3	922.7	873.1	850.8	840.8
20°	911.5	884.2	833.4	811.1	796.2
22.5°	879.3	844.6	794.9	767.7	751.5
25°	843.3	806.1	749.1	721.8	706.9
27.5°	804.9	763.9	705.7	674.6	659.8
30°	767.7	720.5	661.0	626.3	608.9
32.5°	728.0	674.6	613.9	577.9	560.6
35°	683.3	631.2	569.2	529.5	509.7
37.5°	641.2	587.8	523.3	481.2	458.9
40°	596.5	543.2	477.5	434.1	410.5
42.5°	549.4	498.5	434.1	383.2	360.9
45°	504.7	451.4	389.4	336.1	311.3
47.5°	456.4	406.8	346.0	291.4	274.1
50°	406.8	360.9	303.8	254.2	245.6
52.5°	358.4	320.0	261.7	229.4	225.7
55°	308.8	276.6	226.9	207.1	200.9
57.5°	262.9	239.4	194.7	184.8	182.3
60°	219.5	199.7	172.4	166.2	162.5
62.5°	177.3	166.2	150.1	147.6	145.1
65°	141.4	136.4	129.0	129.0	127.7
67.5°	111.6	111.6	110.4	112.9	111.6
70°	89.3	90.5	93.0	95.5	96.7
72.5°	70.7	74.4	76.9	80.6	81.9
75°	54.6	58.3	63.2	65.7	68.2
77.5°	39.7	43.4	48.4	52.1	54.6
80°	27.3	29.8	34.7	39.7	42.2
82.5°	17.4	18.6	22.3	27.3	29.8
85°	7.4	8.7	11.2	16.1	18.6
87.5°	0.0	0.0	1.2	5.0	8.7
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	17.48	18.93	17.84	19.24	19.56	15.57	17.02	15.94	17.34	17.65
	3H	18.37	19.67	18.75	20.00	20.36	17.15	18.44	17.52	18.77	19.13
	4H	18.66	19.87	19.06	20.22	20.60	17.74	18.95	18.14	19.30	19.68
	6H	18.81	19.92	19.22	20.29	20.68	18.19	19.31	18.61	19.68	20.07
	8H	18.83	19.89	19.26	20.28	20.68	18.34	19.40	18.77	19.79	20.20
	12H	18.82	19.84	19.25	20.22	20.65	18.44	19.46	18.87	19.84	20.27
4H	2H	17.72	18.93	18.12	19.28	19.66	16.11	17.33	16.52	17.68	18.06
	3H	18.83	19.83	19.25	20.24	20.64	17.89	18.89	18.30	19.29	19.69
	4H	19.22	20.12	19.66	20.54	20.98	18.60	19.50	19.03	19.91	20.36
	6H	19.47	20.24	19.92	20.69	21.15	19.17	19.95	19.63	20.39	20.86
	8H	19.51	20.24	19.97	20.68	21.15	19.36	20.09	19.83	20.54	21.00
	12H	19.52	20.16	20.00	20.64	21.12	19.50	20.15	19.99	20.63	21.10
8H	4H	19.38	20.11	19.85	20.55	21.02	18.81	19.54	19.27	19.98	20.45
	6H	19.69	20.29	20.19	20.79	21.26	19.49	20.08	19.98	20.58	21.06
	8H	19.77	20.31	20.29	20.82	21.31	19.74	20.28	20.26	20.79	21.28
	12H	19.81	20.28	20.32	20.77	21.34	19.95	20.43	20.46	20.92	21.49
12H	4H	19.39	20.03	19.87	20.51	20.99	18.81	19.45	19.29	19.93	20.41
	6H	19.71	20.25	20.23	20.76	21.25	19.49	20.03	20.01	20.54	21.03
	8H	19.82	20.30	20.33	20.79	21.36	19.80	20.27	20.31	20.77	21.33