

Scaled data based on original data using
LM-79-2019 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: S123RDR-S1165D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

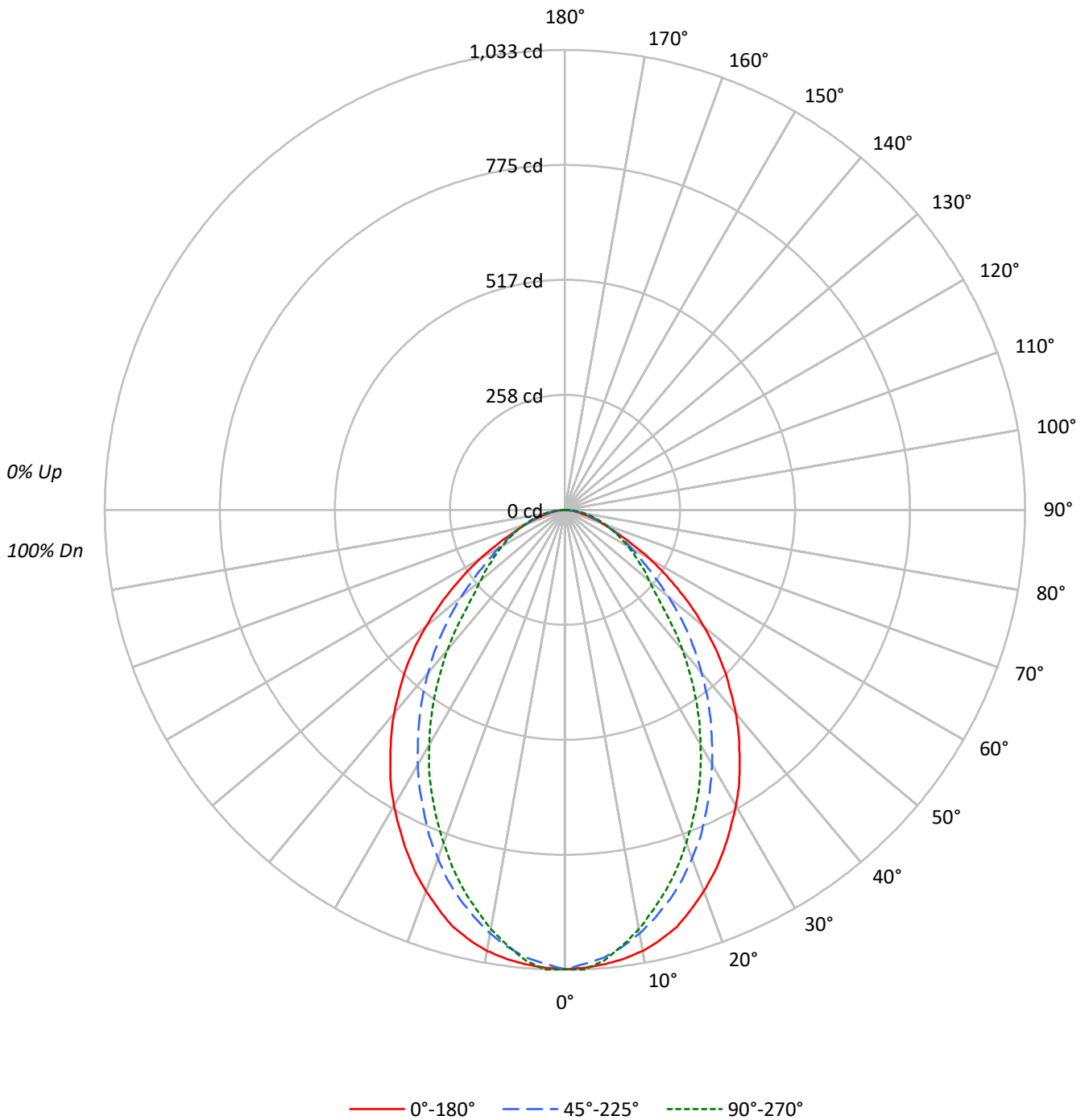
Lumens per Lamp: N/A
Luminaire Lumens: 1804.7 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): 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

(END OF REPORT)