

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: P1059128

Luminaire Tested: S123RDR-S1165D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

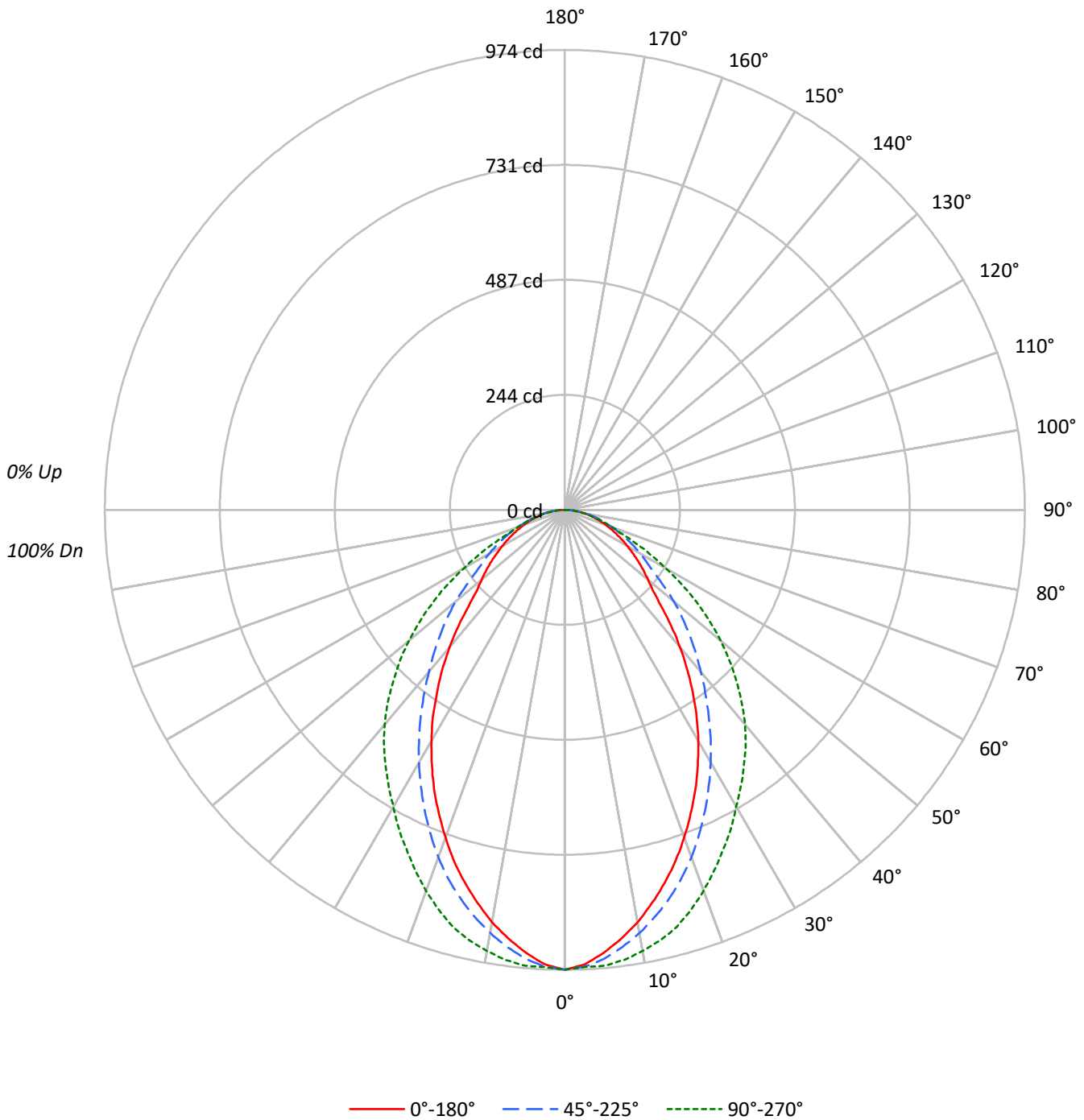
Lumens per Lamp: N/A
Luminaire Lumens: 1759.2 lumens
Efficiency: N/A
Efficacy: 42.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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										
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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	51	51	51	51	51														
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11436	11436	11436
5°	11102	11251	11425
10°	10577	10850	11313
15°	9938	10368	11117
20°	9231	9787	10729
25°	8476	9098	10281
30°	7664	8375	9845
35°	6759	7610	9477
40°	5811	6861	9101
45°	4778	6181	8532
50°	4193	5506	7863
55°	3880	4698	6965
60°	3567	4317	5766
65°	3331	3965	4537
70°	3135	3605	3605
75°	2954	3316	3108
80°	2779	3009	2624
85°	2614	2924	1994

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8532 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	5.1
10°-20°	241.4	13.7
20°-30°	327.3	18.6
30°-40°	342.2	19.5
40°-50°	296.8	16.9
50°-60°	220.8	12.6
60°-70°	141.7	8.1
70°-80°	76.0	4.3
80°-90°	23.0	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°	658.8	37.4
0°-40°	1001.0	56.9
0°-60°	1518.6	86.3
0°-90°	1759.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1759.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	942	958	954	961	969	88
15°	818	837	853	887	914	229
25°	654	675	702	749	794	300
35°	472	494	531	598	661	294
45°	288	309	372	452	514	226
55°	190	194	230	295	340	170
65°	120	130	143	152	163	119
75°	65	75	73	70	68	69
85°	19	24	22	18	15	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.9	973.9	973.9	973.9	973.9
2.5°	963.6	977.3	968.2	968.2	969.3
5°	941.9	957.9	954.5	961.3	969.3
7.5°	915.7	932.8	933.9	949.9	961.3
10°	887.1	904.3	910.0	932.8	948.8
12.5°	852.9	872.3	882.6	911.1	933.9
15°	817.5	836.9	852.9	887.1	914.5
17.5°	779.8	799.2	819.8	858.6	888.3
20°	738.7	759.3	783.2	822.0	858.6
22.5°	696.5	718.2	743.3	785.5	826.6
25°	654.2	674.8	702.2	749.0	793.5
27.5°	609.7	631.4	659.9	711.3	761.5
30°	565.2	586.9	617.7	672.5	726.1
32.5°	519.5	541.2	574.3	635.9	694.2
35°	471.5	494.4	530.9	598.3	661.1
37.5°	425.9	447.6	488.7	562.9	629.1
40°	379.1	401.9	447.6	527.5	593.7
42.5°	333.4	356.2	409.9	489.8	554.9
45°	287.7	309.4	372.2	452.1	513.8
47.5°	252.3	268.3	336.8	412.2	473.8
50°	229.5	235.2	301.4	373.3	430.4
52.5°	208.9	213.5	262.6	334.5	385.9
55°	189.5	194.1	229.5	294.6	340.2
57.5°	170.1	175.8	204.4	253.5	294.6
60°	151.9	158.7	183.8	216.9	245.5
62.5°	135.9	143.9	163.3	183.8	203.2
65°	119.9	130.2	142.7	151.9	163.3
67.5°	105.0	116.5	123.3	125.6	126.7
70°	91.3	102.8	105.0	105.0	105.0
72.5°	77.6	90.2	87.9	86.8	85.6
75°	65.1	75.4	73.1	69.6	68.5
77.5°	52.5	61.7	58.2	55.9	52.5
80°	41.1	48.0	44.5	42.2	38.8
82.5°	30.8	35.4	32.0	29.7	26.3
85°	19.4	24.0	21.7	18.3	14.8
87.5°	10.3	13.7	11.4	10.3	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)