

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: P1059020

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059020
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-S1000D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

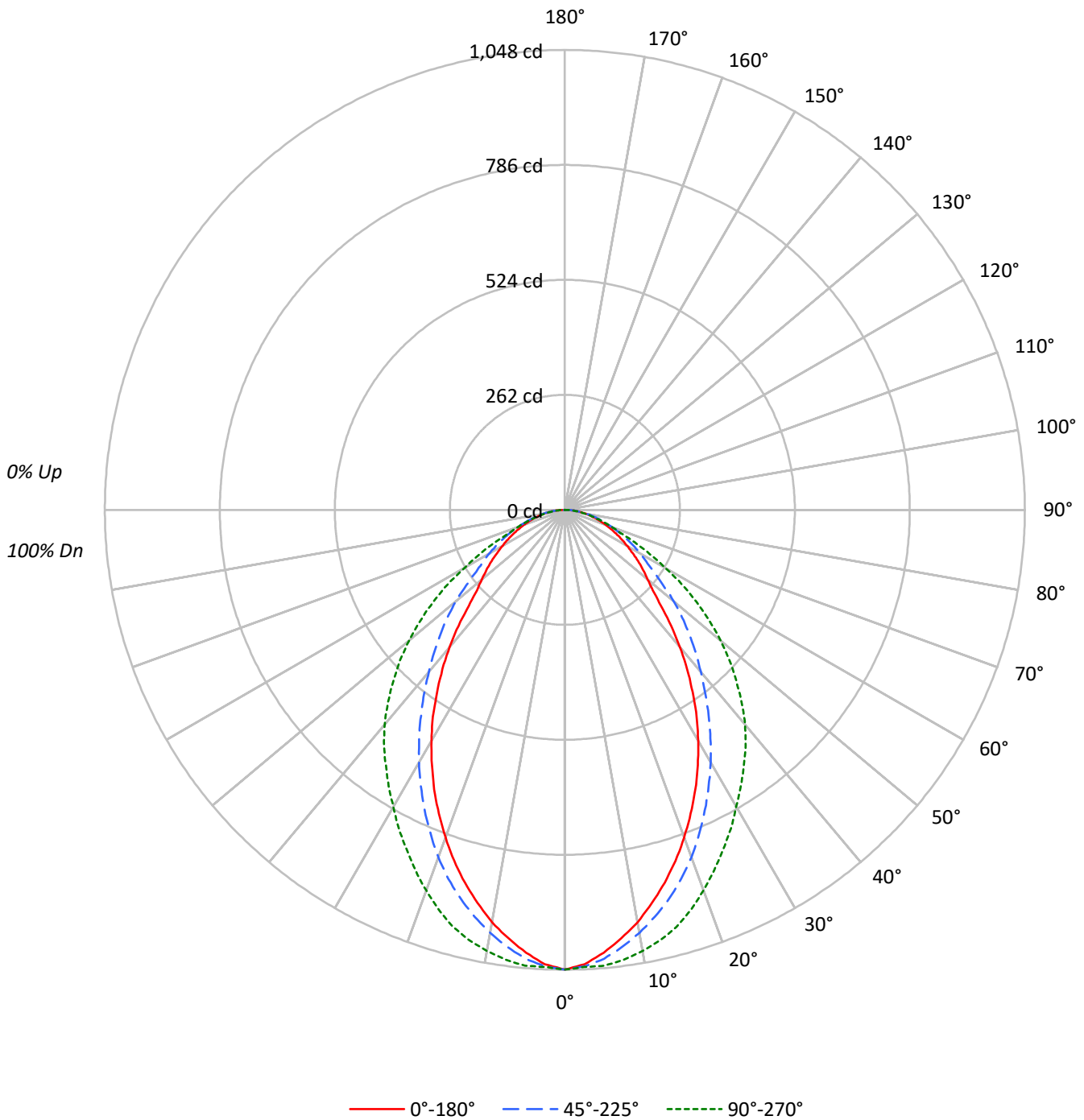
Lumens per Lamp: N/A
Luminaire Lumens: 1892.2 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12300	12300	12300
5°	11942	12102	12289
10°	11377	11671	12168
15°	10689	11153	11959
20°	9929	10527	11540
25°	9117	9786	11058
30°	8243	9009	10590
35°	7271	8185	10192
40°	6249	7379	9789
45°	5140	6648	9177
50°	4509	5922	8458
55°	4174	5053	7493
60°	3835	4643	6200
65°	3581	4265	4879
70°	3371	3880	3880
75°	3176	3566	3344
80°	2989	3239	2827
85°	2816	3139	2156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9177 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	5.1
10°-20°	259.7	13.7
20°-30°	352.1	18.6
30°-40°	368.1	19.5
40°-50°	319.3	16.9
50°-60°	237.5	12.6
60°-70°	152.4	8.1
70°-80°	81.7	4.3
80°-90°	24.7	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°	708.6	37.4
0°-40°	1076.7	56.9
0°-60°	1633.4	86.3
0°-90°	1892.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1892.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1048	1048	1048	1048	1048	
5°	1013	1030	1027	1034	1043	95
15°	879	900	917	954	984	246
25°	704	726	755	806	854	323
35°	507	532	571	644	711	317
45°	310	333	400	486	553	243
55°	204	209	247	317	366	182
65°	129	140	154	163	176	128
75°	70	81	79	75	74	74
85°	21	26	23	20	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1047.5	1047.5	1047.5	1047.5	1047.5
2.5°	1036.5	1051.2	1041.4	1041.4	1042.6
5°	1013.1	1030.3	1026.7	1034.0	1042.6
7.5°	984.9	1003.3	1004.6	1021.7	1034.0
10°	954.2	972.6	978.8	1003.3	1020.5
12.5°	917.4	938.2	949.3	980.0	1004.6
15°	879.3	900.2	917.4	954.2	983.7
17.5°	838.8	859.6	881.7	923.5	955.4
20°	794.6	816.7	842.4	884.2	923.5
22.5°	749.1	772.5	799.5	844.9	889.1
25°	703.7	725.8	755.3	805.6	853.5
27.5°	655.8	679.1	709.8	765.1	819.1
30°	607.9	631.2	664.4	723.3	781.0
32.5°	558.8	582.1	617.7	684.0	746.7
35°	507.2	531.8	571.0	643.5	711.0
37.5°	458.1	481.4	525.6	605.4	676.7
40°	407.7	432.3	481.4	567.4	638.6
42.5°	358.6	383.2	440.9	526.8	596.8
45°	309.5	332.8	400.3	486.3	552.6
47.5°	271.4	288.6	362.3	443.3	509.6
50°	246.8	253.0	324.2	401.6	463.0
52.5°	224.7	229.6	282.5	359.8	415.1
55°	203.9	208.8	246.8	316.8	366.0
57.5°	183.0	189.1	219.8	272.6	316.8
60°	163.3	170.7	197.7	233.3	264.0
62.5°	146.1	154.7	175.6	197.7	218.6
65°	128.9	140.0	153.5	163.3	175.6
67.5°	113.0	125.3	132.6	135.1	136.3
70°	98.2	110.5	113.0	113.0	113.0
72.5°	83.5	97.0	94.6	93.3	92.1
75°	70.0	81.1	78.6	74.9	73.7
77.5°	56.5	66.3	62.6	60.2	56.5
80°	44.2	51.6	47.9	45.4	41.8
82.5°	33.2	38.1	34.4	31.9	28.2
85°	20.9	25.8	23.3	19.6	16.0
87.5°	11.1	14.7	12.3	11.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)