

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: P1059027

Luminaire Tested: S123RDR-S1000D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059027
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

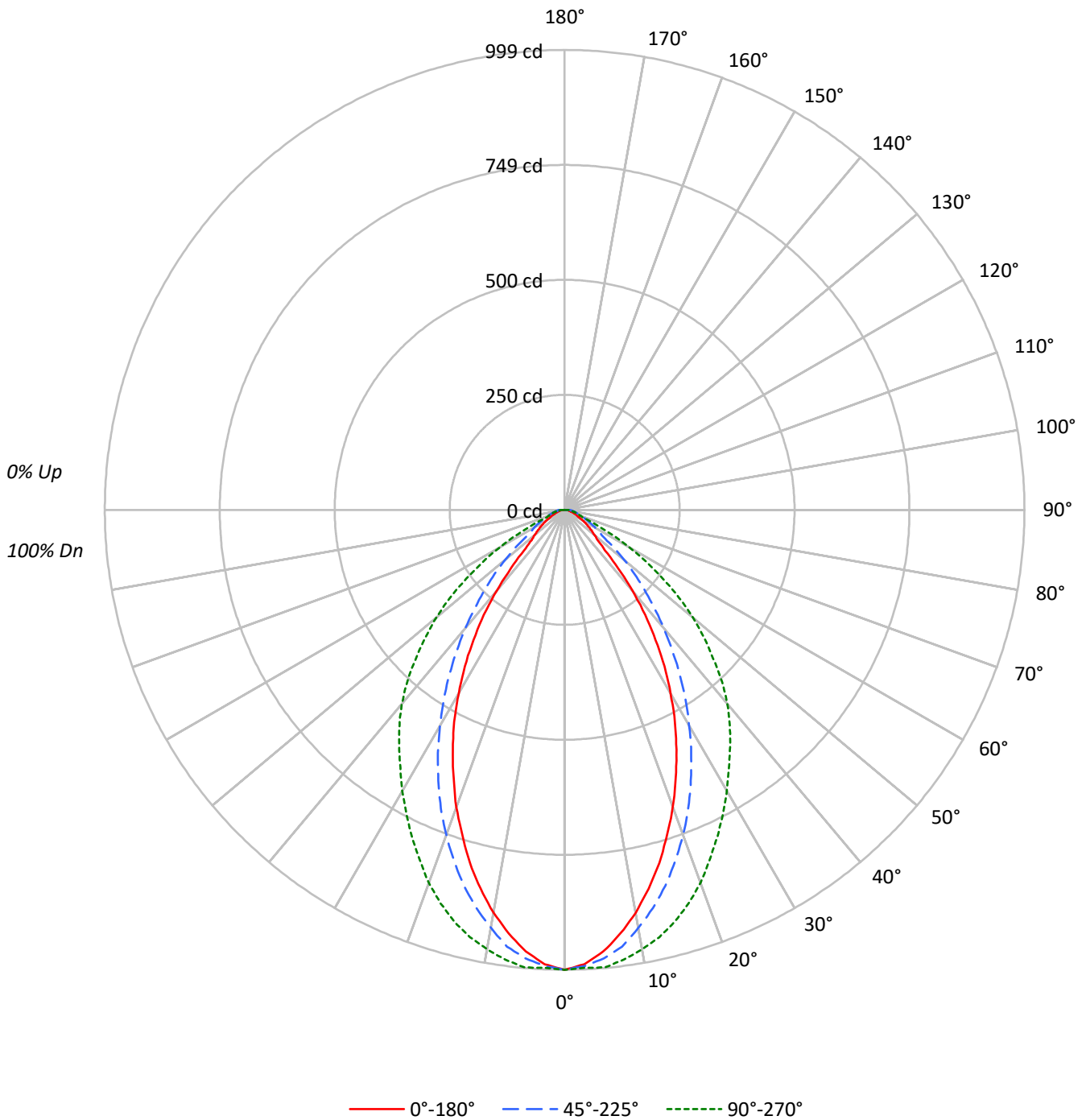
Lumens per Lamp: N/A
Luminaire Lumens: 1341.2 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89		89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79		79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71		71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64		64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58		58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52		52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48		48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44		44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40		40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11732	11732	11732
5°	11352	11528	11761
10°	10595	10995	11558
15°	9656	10275	11255
20°	8591	9398	10778
25°	7445	8410	10163
30°	6243	7337	9558
35°	4946	6244	8984
40°	3501	5137	8428
45°	2061	4060	7584
50°	1542	3084	6642
55°	1296	2084	5335
60°	1050	1778	3788
65°	828	1517	2001
70°	724	1322	1236
75°	676	1239	1184
80°	669	1346	1177
85°	835	2007	1509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7584 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	6.9
10°-20°	239.0	17.8
20°-30°	304.3	22.7
30°-40°	286.2	21.3
40°-50°	206.2	15.4
50°-60°	119.1	8.9
60°-70°	54.4	4.1
70°-80°	27.2	2.0
80°-90°	12.9	1.0
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°	635.2	47.4
0°-40°	921.5	68.7
0°-60°	1246.7	93.0
0°-90°	1341.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1341.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	999	999	999	999	999	
5°	963	979	978	988	998	90
15°	794	823	845	892	926	221
25°	575	604	649	721	784	263
35°	345	375	436	536	627	214
45°	124	155	244	367	457	105
55°	63	66	102	194	261	57
65°	30	42	55	61	72	31
75°	15	28	27	26	26	16
85°	6	14	15	14	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	999.1	999.1	999.1	999.1	999.1
2.5°	987.9	1000.3	991.6	992.8	995.3
5°	963.1	979.2	978.0	987.9	997.8
7.5°	928.3	946.9	956.9	971.8	985.4
10°	888.6	909.7	922.1	949.4	969.3
12.5°	842.7	870.0	886.1	922.1	950.7
15°	794.3	822.8	845.2	892.3	925.8
17.5°	739.7	770.7	799.2	855.1	896.0
20°	687.5	717.3	752.1	812.9	862.5
22.5°	630.5	662.7	702.4	767.0	822.8
25°	574.6	604.4	649.1	721.1	784.4
27.5°	518.8	548.5	595.7	675.1	744.6
30°	460.4	491.5	541.1	629.2	704.9
32.5°	403.3	433.1	489.0	584.5	664.0
35°	345.0	374.8	435.6	536.1	626.7
37.5°	287.9	319.0	383.5	496.4	589.5
40°	228.4	261.9	335.1	455.5	549.8
42.5°	172.5	208.5	286.7	413.3	506.4
45°	124.1	155.1	244.5	367.4	456.7
47.5°	96.8	112.9	206.0	320.2	410.8
50°	84.4	86.9	168.8	276.8	363.6
52.5°	73.2	75.7	132.8	235.8	314.0
55°	63.3	65.8	101.8	193.6	260.6
57.5°	53.4	57.1	84.4	153.9	209.7
60°	44.7	49.6	75.7	117.9	161.3
62.5°	36.0	44.7	64.5	86.9	115.4
65°	29.8	42.2	54.6	60.8	72.0
67.5°	24.8	38.5	45.9	43.4	42.2
70°	21.1	34.7	38.5	34.7	36.0
72.5°	17.4	32.3	32.3	29.8	29.8
75°	14.9	28.5	27.3	26.1	26.1
77.5°	12.4	24.8	23.6	22.3	21.1
80°	9.9	19.9	19.9	18.6	17.4
82.5°	8.7	16.1	16.1	16.1	13.7
85°	6.2	13.7	14.9	13.7	11.2
87.5°	5.0	12.4	12.4	11.2	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)