

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: P1059237

Luminaire Tested: S123RDR-S340D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

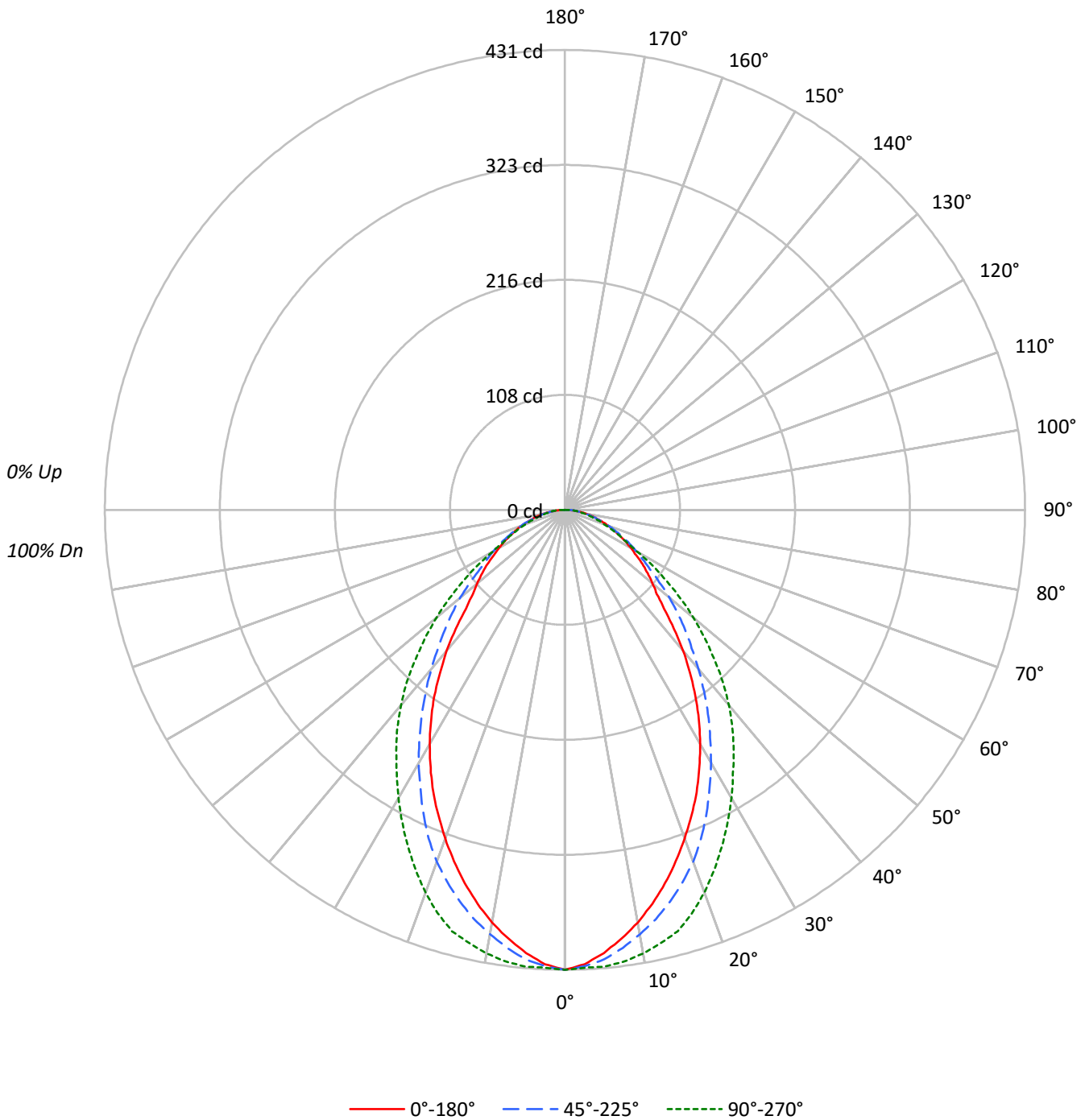
Lumens per Lamp: N/A
Luminaire Lumens: 757.4 lumens
Efficiency: N/A
Efficacy: 60.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5061	5061	5061
5°	4914	4985	5063
10°	4684	4816	5033
15°	4406	4622	4970
20°	4097	4385	4770
25°	3782	4066	4508
30°	3434	3712	4230
35°	3058	3350	3951
40°	2638	2984	3662
45°	2180	2642	3283
50°	1958	2331	2866
55°	1816	1990	2377
60°	1672	1813	1820
65°	1556	1639	1525
70°	1466	1490	1336
75°	1379	1329	1180
80°	1305	1204	1102
85°	1253	1347	1253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3283 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	5.3
10°-20°	107.6	14.2
20°-30°	145.5	19.2
30°-40°	149.5	19.7
40°-50°	125.6	16.6
50°-60°	90.0	11.9
60°-70°	57.3	7.6
70°-80°	31.5	4.2
80°-90°	10.5	1.4
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°	293.0	38.7
0°-40°	442.5	58.4
0°-60°	658.1	86.9
0°-90°	757.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	431	431	431	431	431	
5°	417	424	423	426	430	39
15°	362	372	380	396	409	102
25°	292	303	314	331	348	134
35°	213	225	234	254	276	133
45°	131	143	159	182	198	104
55°	89	90	97	110	116	79
65°	56	59	59	56	55	56
75°	30	33	29	27	26	32
85°	9	10	10	10	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	431.0	431.0	431.0	431.0	431.0
2.5°	426.2	432.1	428.1	428.4	429.5
5°	416.9	424.4	422.9	425.8	429.5
7.5°	405.4	413.6	414.0	421.0	426.9
10°	392.8	401.4	403.9	414.7	422.1
12.5°	378.0	387.3	392.8	406.2	415.8
15°	362.4	372.4	380.2	396.5	408.8
17.5°	345.3	356.1	366.1	383.5	396.2
20°	327.9	339.4	350.9	367.2	381.7
22.5°	309.7	321.6	333.5	349.4	365.4
25°	291.9	303.1	313.8	330.9	347.9
27.5°	272.6	284.1	293.4	312.3	330.1
30°	253.3	264.8	273.8	293.4	312.0
32.5°	233.3	245.2	253.3	273.8	293.0
35°	213.3	224.8	233.7	254.5	275.6
37.5°	192.1	204.8	213.7	237.0	257.8
40°	172.1	184.0	194.7	219.2	238.9
42.5°	151.3	163.6	175.8	201.0	219.2
45°	131.3	142.8	159.1	182.1	197.7
47.5°	116.8	124.3	143.2	162.5	177.3
50°	107.2	110.2	127.6	144.7	156.9
52.5°	97.6	99.8	111.7	127.2	136.5
55°	88.7	90.5	97.2	110.2	116.1
57.5°	79.0	80.9	86.4	93.8	97.2
60°	71.2	72.7	77.2	78.3	77.5
62.5°	63.4	65.7	67.9	65.3	64.2
65°	56.0	59.3	59.0	55.6	54.9
67.5°	49.3	52.7	50.8	47.5	46.4
70°	42.7	46.0	43.4	40.1	38.9
72.5°	36.4	40.1	36.0	33.0	32.3
75°	30.4	33.4	29.3	27.1	26.0
77.5°	24.9	27.1	23.4	21.5	20.8
80°	19.3	20.8	17.8	16.7	16.3
82.5°	14.1	14.8	13.0	13.7	13.4
85°	9.3	9.6	10.0	10.4	9.3
87.5°	4.5	6.3	6.3	5.9	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)