

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: P1056483

Luminaire Tested: S125R3DR-S850D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S850D930-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

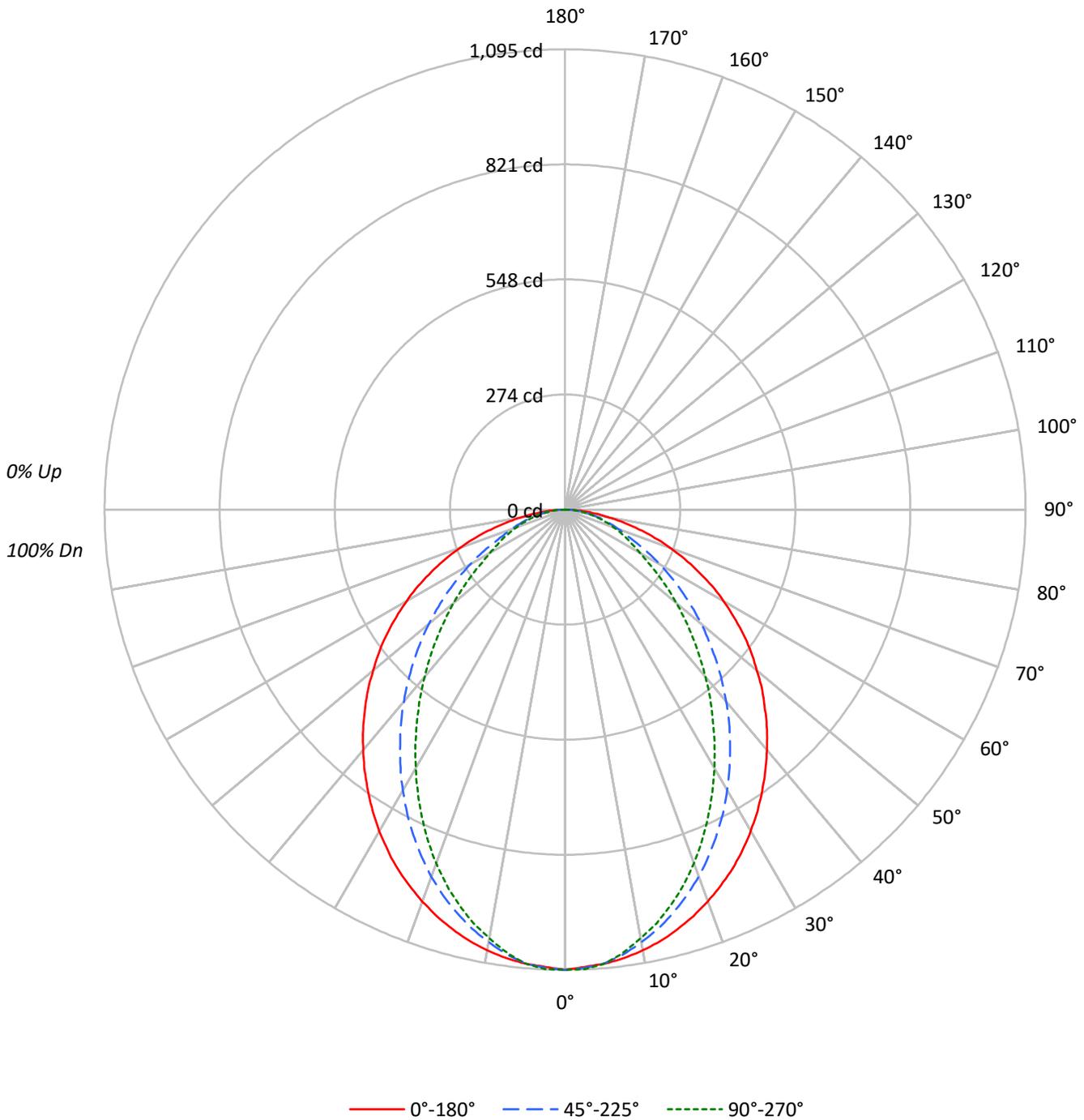
Lumens per Lamp: N/A
Luminaire Lumens: 2320.7 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	100	100	
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86	86	86	86	
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73	73	73	73	
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63	
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55	55	55	55	
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48	48	48	48	
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43	43	43	43	
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38	38	38	38	
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34	34	34	34	
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31	31	31	31	
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28	28	28	28	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7740	7740	7740
5°	7695	7689	7695
10°	7644	7503	7433
15°	7566	7273	7125
20°	7464	6992	6741
25°	7352	6658	6283
30°	7208	6296	5797
35°	7050	5903	5291
40°	6892	5500	4792
45°	6724	5078	4296
50°	6546	4644	3802
55°	6381	4170	3306
60°	6156	3666	2905
65°	5851	3110	2700
70°	5494	2780	2528
75°	4966	2562	2382
80°	4315	2325	2223
85°	3374	2052	2052

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6724 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	4.4
10°-20°	281.3	12.1
20°-30°	397.4	17.1
30°-40°	437.4	18.8
40°-50°	408.0	17.6
50°-60°	325.7	14.0
60°-70°	219.2	9.4
70°-80°	116.8	5.0
80°-90°	32.5	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°	781.1	33.7
0°-40°	1218.5	52.5
0°-60°	1952.3	84.1
0°-90°	2320.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2320.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1084	1093	1084	1080	1084	103
15°	1034	1028	994	977	974	291
25°	942	914	854	816	806	434
35°	817	769	684	630	613	511
45°	673	609	508	446	430	519
55°	518	439	338	284	268	462
65°	350	273	186	165	161	347
75°	182	121	94	88	87	194
85°	42	28	25	26	25	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1094.9	1094.9	1094.9	1094.9	1094.9
2.5°	1089.2	1098.2	1090.9	1092.5	1094.1
5°	1084.3	1093.3	1083.5	1080.3	1084.3
7.5°	1076.2	1083.5	1067.2	1059.9	1063.1
10°	1064.8	1069.7	1045.2	1035.4	1035.4
12.5°	1050.9	1050.9	1021.6	1007.7	1007.7
15°	1033.8	1028.1	993.8	976.7	973.5
17.5°	1014.2	1003.6	962.9	940.9	936.8
20°	992.2	975.1	929.4	900.9	896.0
22.5°	967.8	945.7	892.8	857.7	852.0
25°	942.5	913.9	853.6	816.1	805.5
27.5°	913.9	879.7	813.7	771.3	758.2
30°	883.0	843.8	771.3	724.0	710.1
32.5°	851.2	807.1	728.1	677.5	662.0
35°	816.9	768.8	684.0	630.2	613.1
37.5°	782.7	730.5	640.8	584.6	566.6
40°	746.8	689.7	596.0	538.1	519.3
42.5°	710.9	649.8	552.0	493.3	473.7
45°	672.6	609.0	507.9	446.0	429.7
47.5°	635.9	567.4	464.7	404.4	386.5
50°	595.2	524.2	422.3	362.0	345.7
52.5°	557.7	481.8	379.9	323.7	306.6
55°	517.7	439.4	338.3	284.5	268.2
57.5°	476.1	397.1	298.4	247.9	232.4
60°	435.4	354.7	259.3	212.8	205.5
62.5°	393.8	314.7	222.6	186.7	181.8
65°	349.8	273.1	185.9	164.7	161.4
67.5°	308.2	233.2	156.5	144.3	141.0
70°	265.8	193.2	134.5	123.9	122.3
72.5°	224.2	154.9	113.3	106.0	104.4
75°	181.8	120.7	93.8	88.1	87.2
77.5°	142.7	90.5	74.2	71.7	70.1
80°	106.0	67.7	57.1	55.4	54.6
82.5°	72.6	46.5	40.8	40.8	39.1
85°	41.6	28.5	25.3	26.1	25.3
87.5°	15.5	12.2	11.4	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)