

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: P1056422

Luminaire Tested: S125R3DR-S375D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S375D850-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

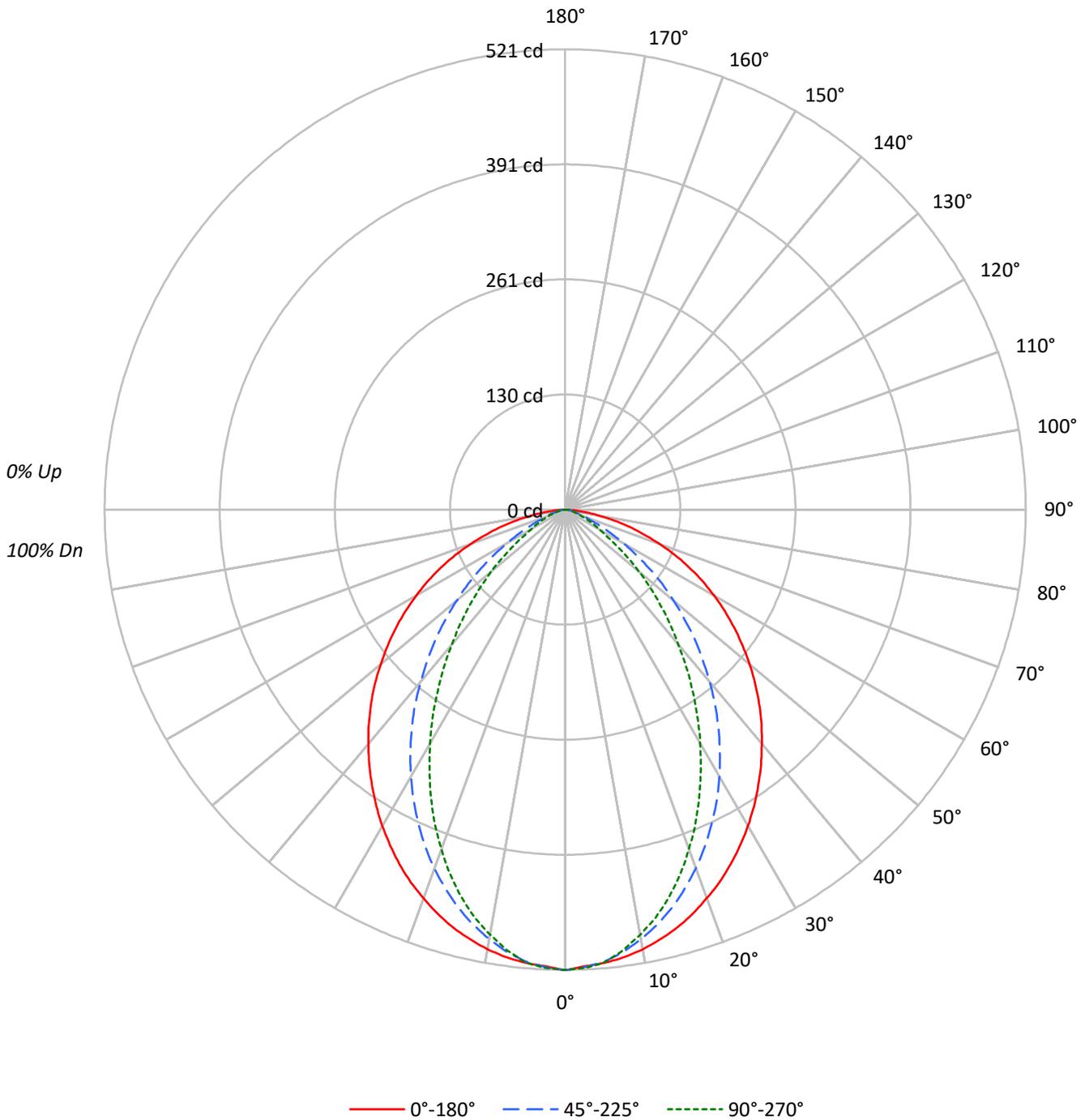
Lumens per Lamp: N/A
Luminaire Lumens: 942.3 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88	
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77	
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67			67	
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59			59	
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52			52	
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47			47	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42			42	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38	
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35			35	
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32			32	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3685	3685	3685
5°	3655	3645	3652
10°	3628	3545	3507
15°	3585	3416	3324
20°	3522	3254	3079
25°	3456	3061	2801
30°	3377	2849	2495
35°	3287	2608	2170
40°	3194	2343	1836
45°	3103	2065	1521
50°	2994	1757	1194
55°	2879	1427	869
60°	2750	1065	621
65°	2584	703	485
70°	2336	490	339
75°	2029	317	265
80°	1592	236	216
85°	819	195	154

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3103 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	5.2
10°-20°	132.0	14.0
20°-30°	182.5	19.4
30°-40°	193.4	20.5
40°-50°	168.8	17.9
50°-60°	120.1	12.7
60°-70°	66.8	7.1
70°-80°	25.7	2.7
80°-90°	4.5	0.5
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°	363.1	38.5
0°-40°	556.5	59.1
0°-60°	845.4	89.7
0°-90°	942.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	515	519	514	512	515	49
15°	490	486	467	457	454	138
25°	443	428	392	368	359	204
35°	381	355	302	266	252	238
45°	310	273	207	165	152	239
55°	234	187	116	80	70	209
65°	154	101	42	31	29	153
75°	74	29	12	10	10	79
85°	10	3	2	2	2	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.3	521.3	521.3	521.3	521.3
2.5°	517.5	522.8	518.4	518.9	519.4
5°	515.0	518.9	513.6	512.1	514.6
7.5°	511.2	514.1	504.9	501.5	503.0
10°	505.4	506.4	493.8	489.0	488.5
12.5°	498.1	496.7	481.3	473.5	473.0
15°	489.9	485.6	466.8	456.6	454.2
17.5°	479.8	473.0	449.9	436.8	433.0
20°	468.2	459.0	432.5	415.6	409.3
22.5°	456.6	444.1	413.2	392.0	385.2
25°	443.1	428.2	392.4	368.3	359.1
27.5°	428.6	410.8	371.2	343.2	332.1
30°	413.7	392.9	349.0	317.6	305.6
32.5°	397.7	374.1	325.8	291.6	279.0
35°	380.9	354.8	302.2	265.5	251.5
37.5°	364.0	335.0	279.0	239.9	225.4
40°	346.1	314.7	253.9	213.8	198.9
42.5°	328.7	294.0	230.2	189.2	175.7
45°	310.4	273.2	206.6	165.1	152.1
47.5°	291.6	251.5	182.9	142.4	129.4
50°	272.2	230.2	159.8	120.2	108.6
52.5°	252.9	209.0	138.1	99.0	88.8
55°	233.6	187.3	115.8	80.1	70.5
57.5°	214.3	166.0	95.1	62.8	54.1
60°	194.5	144.3	75.3	46.3	43.9
62.5°	174.7	123.1	58.4	38.1	36.2
65°	154.5	101.4	42.0	30.9	29.0
67.5°	134.2	81.6	30.4	23.7	22.2
70°	113.0	62.3	23.7	17.9	16.4
72.5°	92.7	44.9	16.9	13.0	12.6
75°	74.3	29.0	11.6	9.7	9.7
77.5°	56.0	17.4	8.2	7.2	7.2
80°	39.1	10.1	5.8	5.3	5.3
82.5°	23.7	5.3	3.9	3.4	3.4
85°	10.1	2.9	2.4	1.9	1.9
87.5°	1.9	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)