

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: P1056412

Luminaire Tested: S125R3DR-S375D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S375D830-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

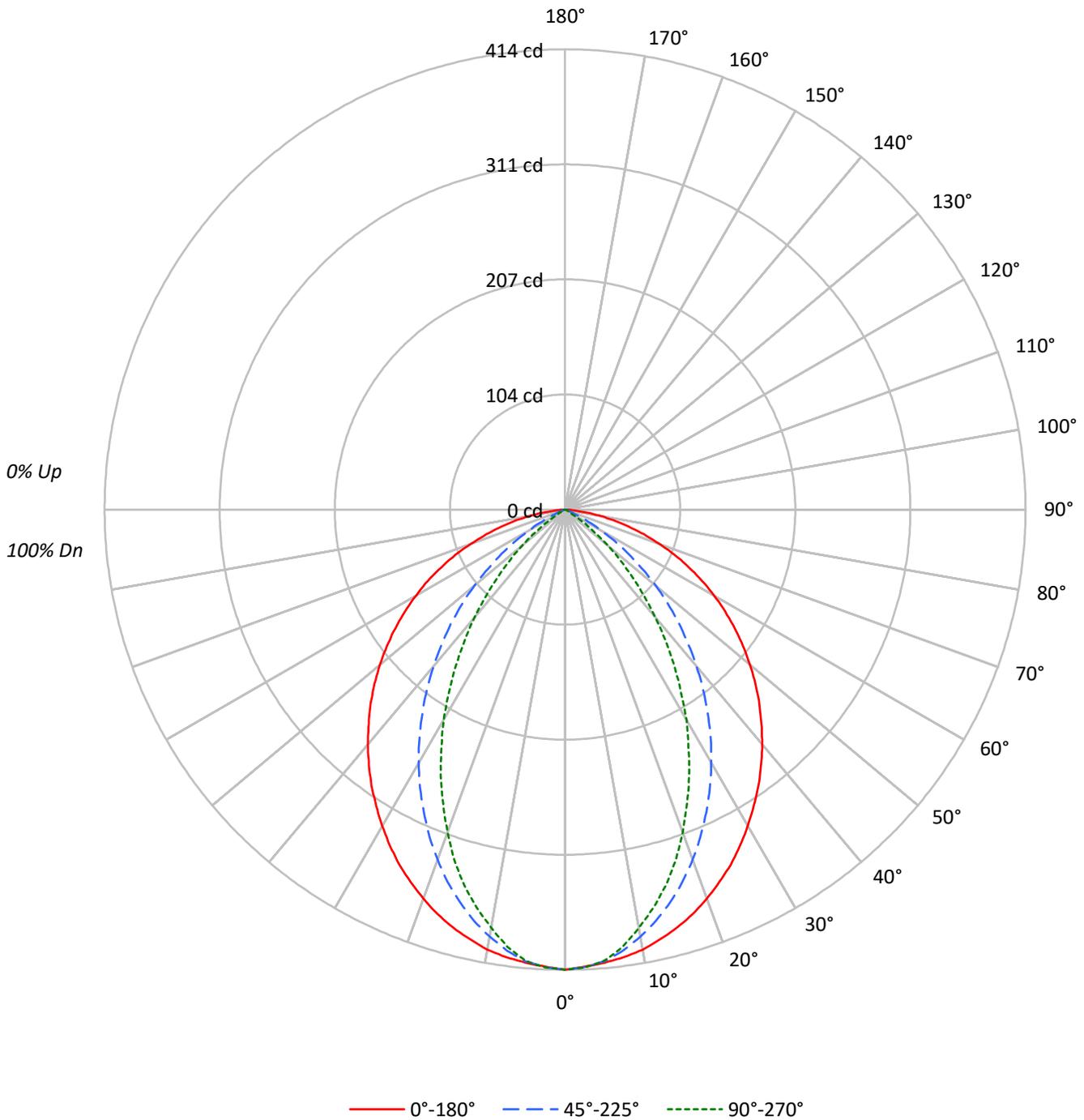
Lumens per Lamp: N/A
Luminaire Lumens: 670.9 lumens
Efficiency: N/A
Efficacy: 53.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056412

CATALOG NUMBER: S125R3DR-S375D830-X4F0-XX-UDD-FLL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1056412

CATALOG NUMBER: S125R3DR-S375D830-X4F0-XX-UDD-FLL-B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78																												
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69																												
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61																												
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55																												
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49																												
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45																												
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41																												
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37																												
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2926	2926	2926
5°	2902	2894	2891
10°	2886	2800	2741
15°	2849	2675	2561
20°	2802	2522	2324
25°	2749	2342	2061
30°	2682	2147	1782
35°	2617	1930	1473
40°	2544	1696	1166
45°	2469	1448	845
50°	2387	1169	545
55°	2296	854	243
60°	2187	527	69
65°	2052	192	42
70°	1856	68	17
75°	1614	22	11
80°	1238	16	0
85°	568	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2469 cd/sqm



TEST NUMBER: P1056412

CATALOG NUMBER: S125R3DR-S375D830-X4F0-XX-UDD-FLL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	5.7
10°-20°	103.2	15.4
20°-30°	139.7	20.8
30°-40°	143.5	21.4
40°-50°	118.9	17.7
50°-60°	76.3	11.4
60°-70°	36.9	5.5
70°-80°	12.5	1.9
80°-90°	1.6	0.2
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°	281.4	41.9
0°-40°	424.8	63.3
0°-60°	620.0	92.4
0°-90°	670.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	670.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	409	412	408	405	407	39
15°	389	384	366	353	350	110
25°	352	335	300	273	264	162
35°	303	274	224	185	171	190
45°	247	206	145	100	84	190
55°	186	137	69	30	20	166
65°	123	68	12	3	2	121
75°	59	13	1	0	0	63
85°	7	0	0	0	0	11
90°	0	0	0	0	0	



TEST NUMBER: P1056412

CATALOG NUMBER: S125R3DR-S375D830-X4F0-XX-UDD-FLL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.9	413.9	413.9	413.9	413.9
2.5°	411.5	414.8	411.9	411.5	412.3
5°	409.0	412.3	407.8	405.3	407.4
7.5°	406.1	407.8	400.0	395.9	396.7
10°	402.0	401.6	390.1	383.2	381.9
12.5°	395.9	393.8	378.7	368.8	366.8
15°	389.3	384.4	365.5	352.8	349.9
17.5°	381.5	373.7	351.2	334.8	330.7
20°	372.5	361.8	335.2	315.1	308.9
22.5°	362.7	349.1	318.4	294.6	286.4
25°	352.4	335.2	300.3	273.2	264.2
27.5°	340.9	320.8	282.3	251.5	240.4
30°	328.6	305.6	263.0	229.3	218.3
32.5°	315.9	290.5	243.7	207.2	193.6
35°	303.2	274.0	223.6	184.6	170.7
37.5°	289.6	257.6	203.9	163.3	148.1
40°	275.7	240.8	183.8	141.1	126.4
42.5°	261.3	223.6	163.7	120.2	105.0
45°	247.0	206.4	144.8	100.1	84.5
47.5°	232.2	188.7	125.1	80.4	66.9
50°	217.0	171.5	106.3	62.8	49.6
52.5°	201.8	153.8	87.0	45.5	33.6
55°	186.3	136.6	69.3	30.4	19.7
57.5°	170.7	119.0	52.9	16.8	7.4
60°	154.7	102.2	37.3	5.7	4.9
62.5°	139.1	84.1	23.4	4.5	3.7
65°	122.7	67.7	11.5	3.3	2.5
67.5°	106.7	52.1	4.9	2.1	1.2
70°	89.8	37.7	3.3	1.2	0.8
72.5°	74.3	24.2	2.1	0.8	0.4
75°	59.1	12.7	0.8	0.4	0.4
77.5°	44.3	5.3	0.4	0.4	0.4
80°	30.4	2.5	0.4	0.4	0.0
82.5°	18.1	0.8	0.4	0.4	0.0
85°	7.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)