

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: P1056418

Luminaire Tested: S125R3DR-S375D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056418
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-S375D840-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

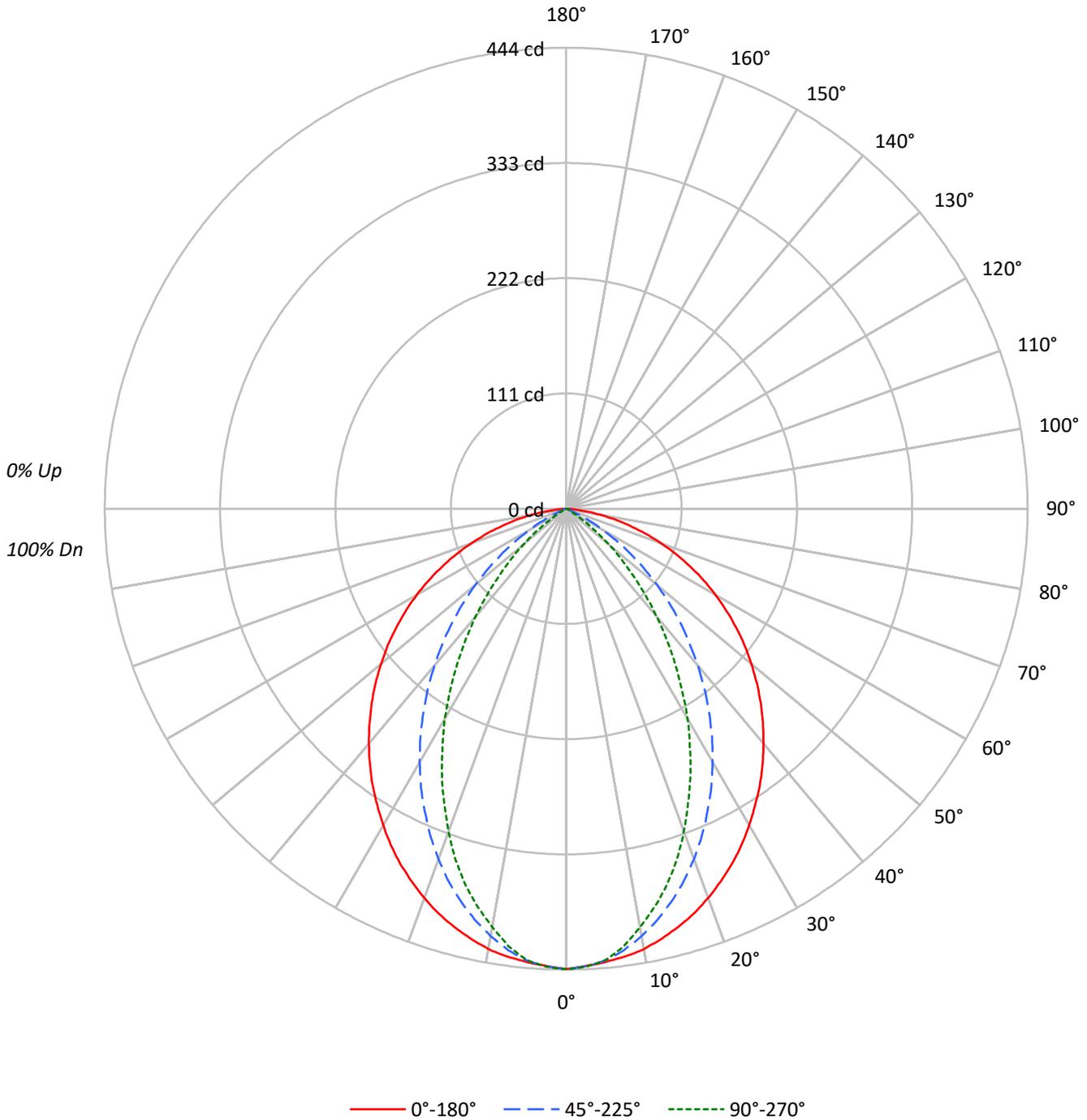
Lumens per Lamp: N/A
Luminaire Lumens: 718.8 lumens
Efficiency: N/A
Efficacy: 57.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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	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°	3135	3135	3135
5°	3110	3100	3098
10°	3092	3001	2937
15°	3053	2866	2744
20°	3002	2702	2490
25°	2945	2510	2208
30°	2874	2300	1909
35°	2803	2068	1578
40°	2726	1817	1250
45°	2645	1552	905
50°	2557	1252	585
55°	2460	916	260
60°	2343	566	75
65°	2198	206	43
70°	1990	72	19
75°	1729	25	11
80°	1323	16	0
85°	608	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2645 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	5.7
10°-20°	110.6	15.4
20°-30°	149.6	20.8
30°-40°	153.7	21.4
40°-50°	127.4	17.7
50°-60°	81.8	11.4
60°-70°	39.5	5.5
70°-80°	13.3	1.9
80°-90°	1.7	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°	301.4	41.9
0°-40°	455.2	63.3
0°-60°	664.3	92.4
0°-90°	718.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	718.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	438	442	437	434	436	42
15°	417	412	392	378	375	118
25°	378	359	322	293	283	174
35°	325	294	240	198	183	203
45°	265	221	155	107	90	204
55°	200	146	74	32	21	178
65°	131	72	12	4	3	130
75°	63	14	1	0	0	67
85°	8	0	0	0	0	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	443.5	443.5	443.5	443.5	443.5
2.5°	440.9	444.4	441.3	440.9	441.8
5°	438.2	441.8	436.9	434.3	436.5
7.5°	435.2	436.9	428.6	424.2	425.0
10°	430.8	430.3	418.0	410.5	409.2
12.5°	424.2	422.0	405.7	395.2	393.0
15°	417.1	411.9	391.6	378.0	374.9
17.5°	408.8	400.4	376.3	358.7	354.3
20°	399.1	387.7	359.1	337.6	331.0
22.5°	388.6	374.1	341.1	315.6	306.8
25°	377.6	359.1	321.8	292.7	283.1
27.5°	365.3	343.7	302.4	269.4	257.6
30°	352.1	327.5	281.8	245.7	233.8
32.5°	338.5	311.2	261.1	222.0	207.5
35°	324.8	293.6	239.6	197.8	182.9
37.5°	310.3	276.0	218.5	174.9	158.7
40°	295.4	258.0	196.9	151.2	135.4
42.5°	280.0	239.6	175.4	128.8	112.5
45°	264.6	221.1	155.2	107.3	90.5
47.5°	248.8	202.2	134.1	86.2	71.6
50°	232.5	183.7	113.8	67.3	53.2
52.5°	216.3	164.8	93.2	48.8	36.0
55°	199.6	146.4	74.3	32.5	21.1
57.5°	182.9	127.5	56.7	18.0	7.9
60°	165.7	109.4	40.0	6.2	5.3
62.5°	149.0	90.1	25.1	4.8	4.0
65°	131.4	72.5	12.3	3.5	2.6
67.5°	114.3	55.8	5.3	2.2	1.3
70°	96.3	40.4	3.5	1.3	0.9
72.5°	79.6	25.9	2.2	0.9	0.4
75°	63.3	13.6	0.9	0.4	0.4
77.5°	47.5	5.7	0.4	0.4	0.4
80°	32.5	2.6	0.4	0.4	0.0
82.5°	19.3	0.9	0.4	0.4	0.0
85°	7.5	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)