

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1062001

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D830-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

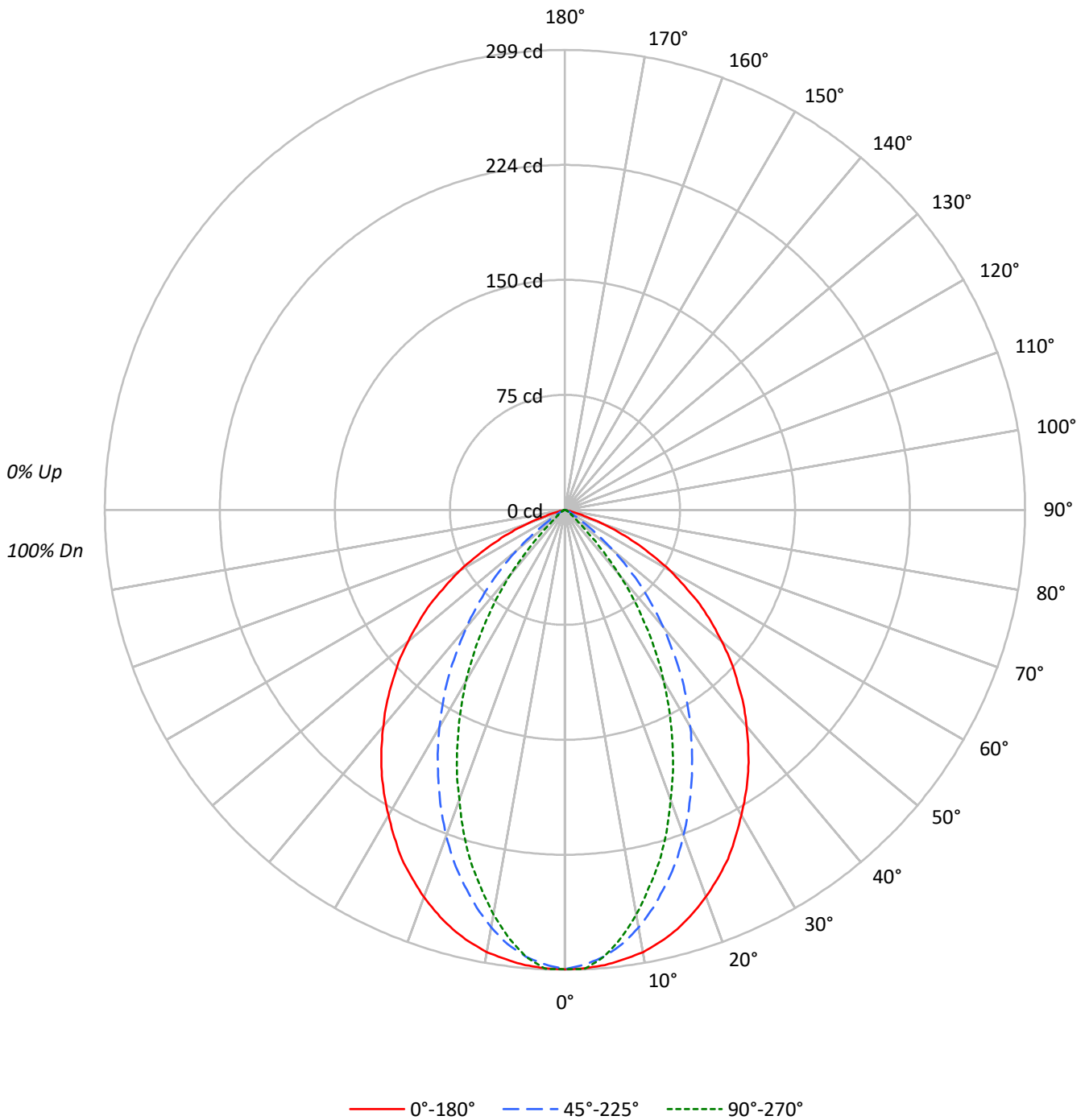
Lumens per Lamp: N/A
Luminaire Lumens: 385.9 lumens
Efficiency: N/A
Efficacy: 33.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2057	2057	2057
5°	2053	2015	2015
10°	2042	1928	1868
15°	2011	1801	1688
20°	1963	1652	1470
25°	1904	1479	1251
30°	1823	1297	1022
35°	1746	1106	765
40°	1650	893	496
45°	1546	676	215
50°	1422	431	80
55°	1282	190	56
60°	1085	81	39
65°	821	52	20
70°	499	24	8
75°	104	11	11
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1546 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	7.1
10°-20°	71.8	18.6
20°-30°	92.2	23.9
30°-40°	86.8	22.5
40°-50°	60.7	15.7
50°-60°	32.4	8.4
60°-70°	12.9	3.4
70°-80°	1.7	0.4
80°-90°	0.0	0.0
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°	191.5	49.6
0°-40°	278.2	72.1
0°-60°	371.3	96.2
0°-90°	385.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	385.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	297	296	292	292	292	28
15°	282	273	253	241	237	79
25°	251	228	195	173	165	115
35°	208	175	132	102	91	130
45°	159	119	69	34	22	122
55°	107	65	16	6	5	95
65°	50	20	3	2	1	50
75°	4	1	0	0	0	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	298.7	298.7	298.7	298.7	298.7
2.5°	298.3	298.7	295.9	298.3	298.7
5°	297.1	296.3	291.6	292.4	291.6
7.5°	294.7	292.8	284.9	282.1	280.6
10°	292.0	287.6	275.8	269.9	267.2
12.5°	287.6	281.3	264.8	255.7	251.8
15°	282.1	273.1	252.6	240.8	236.8
17.5°	275.4	263.6	240.0	225.4	219.5
20°	267.9	252.2	225.4	208.1	200.6
22.5°	259.3	241.2	210.4	191.1	183.6
25°	250.6	228.5	194.7	173.4	164.7
27.5°	240.0	215.5	178.9	156.0	146.6
30°	229.3	202.5	163.1	138.3	128.5
32.5°	218.7	188.7	147.4	119.8	109.9
35°	207.7	174.6	131.6	101.7	91.0
37.5°	195.8	160.4	114.7	84.3	73.3
40°	183.6	146.6	99.3	67.4	55.2
42.5°	171.8	132.8	83.9	50.8	37.4
45°	158.8	119.0	69.4	33.5	22.1
47.5°	146.6	105.6	54.4	19.3	11.4
50°	132.8	91.8	40.2	10.2	7.5
52.5°	119.8	78.4	26.8	6.7	5.9
55°	106.8	65.4	15.8	5.5	4.7
57.5°	91.8	52.8	8.7	4.3	3.5
60°	78.8	41.4	5.9	3.2	2.8
62.5°	63.8	30.3	4.3	2.4	2.0
65°	50.4	20.1	3.2	1.6	1.2
67.5°	37.4	11.8	2.0	0.8	0.8
70°	24.8	6.3	1.2	0.4	0.4
72.5°	13.0	2.8	0.8	0.4	0.4
75°	3.9	1.2	0.4	0.4	0.4
77.5°	0.0	0.4	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.45	12.71	11.81	13.02	13.34	0.00	0.00	0.00	0.00	0.00
	3H	12.03	13.14	12.41	13.47	13.84	0.00	0.00	0.00	0.00	0.00
	4H	12.00	13.03	12.40	13.38	13.76	0.00	0.00	0.00	0.00	0.00
	6H	11.91	12.85	12.33	13.23	13.62	0.00	0.00	0.00	0.00	0.00
	8H	11.86	12.76	12.29	13.15	13.55	0.00	0.00	0.00	0.00	0.00
	12H	11.82	12.67	12.25	13.05	13.48	0.00	0.00	0.00	0.00	0.00
4H	2H	11.22	12.25	11.63	12.61	12.99	0.00	0.00	0.00	0.00	0.00
	3H	11.81	12.65	12.23	13.05	13.46	0.00	0.00	0.00	0.00	0.00
	4H	11.76	12.50	12.20	12.92	13.37	0.00	0.00	0.00	0.00	0.00
	6H	11.67	12.31	12.14	12.76	13.23	0.00	0.00	0.00	0.00	0.00
	8H	11.61	12.21	12.09	12.66	13.13	0.00	0.00	0.00	0.00	0.00
	12H	11.56	12.09	12.05	12.57	13.05	0.00	0.00	0.00	0.00	0.00
8H	4H	11.61	12.21	12.09	12.66	13.13	0.00	0.00	0.00	0.00	0.00
	6H	11.51	11.99	12.01	12.49	12.97	0.00	0.00	0.00	0.00	0.00
	8H	11.44	11.87	11.97	12.39	12.88	0.00	0.00	0.00	0.00	0.00
	12H	11.39	11.77	11.91	12.27	12.84	0.00	0.00	0.00	0.00	0.00
12H	4H	11.56	12.09	12.05	12.57	13.05	0.00	0.00	0.00	0.00	0.00
	6H	11.44	11.87	11.97	12.39	12.88	0.00	0.00	0.00	0.00	0.00
	8H	11.39	11.77	11.91	12.27	12.84	0.00	0.00	0.00	0.00	0.00