

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: P1062010

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062010
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-H375D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

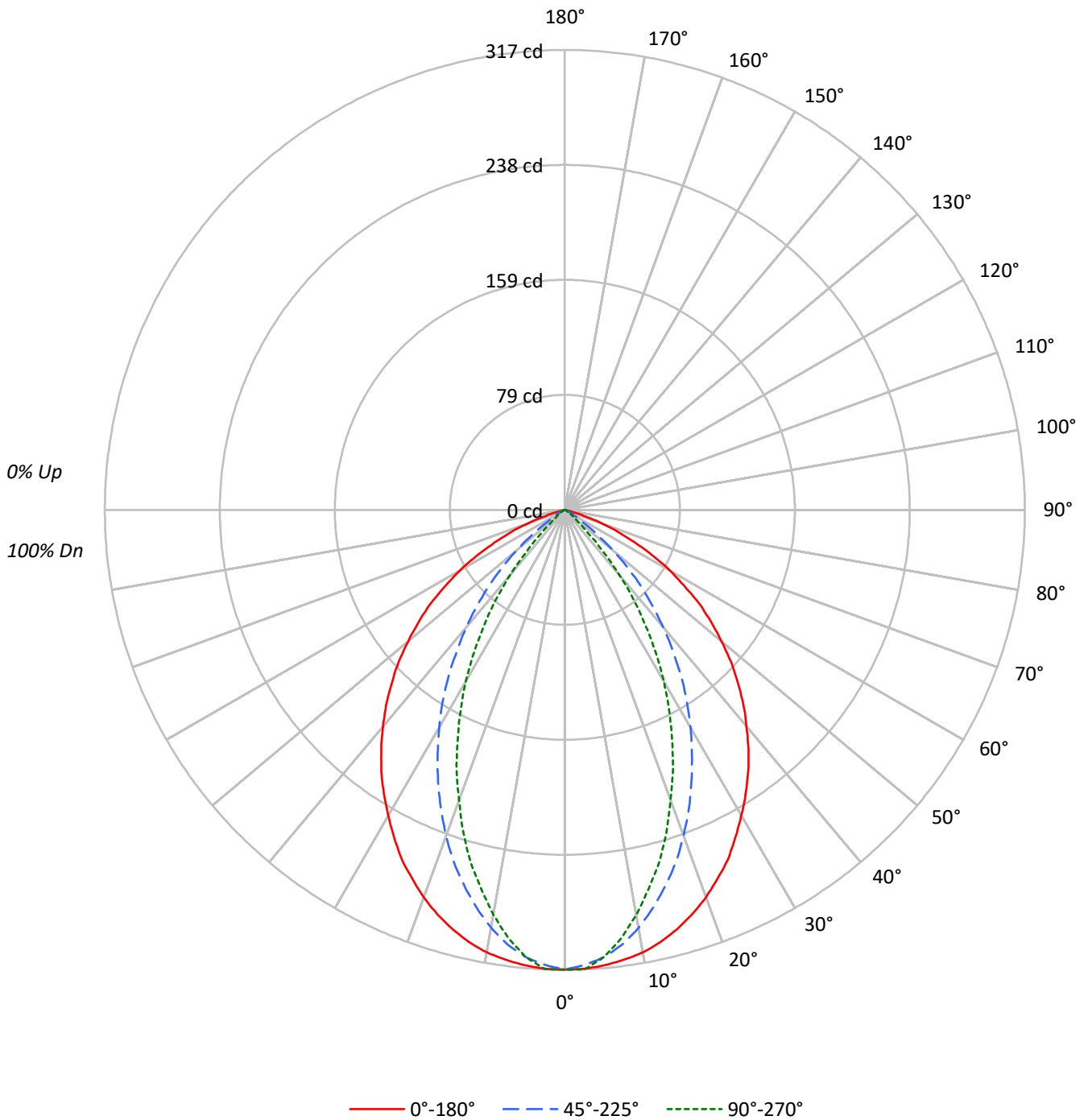
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 409.4 lumens
Efficiency: N/A
Efficacy: 35.0 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

TEST NUMBER: P1062010
CATALOG NUMBER: S125RDR-H375D835-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1062010

CATALOG NUMBER: S125RDR-H375D835-X4F0-XX-UDD-BVL-B

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	53	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°	2182	2182	2182
5°	2179	2138	2138
10°	2166	2046	1981
15°	2133	1910	1791
20°	2083	1752	1559
25°	2020	1569	1327
30°	1934	1376	1084
35°	1852	1173	812
40°	1751	947	526
45°	1641	717	228
50°	1509	456	85
55°	1360	200	60
60°	1151	87	40
65°	872	54	21
70°	529	26	8
75°	112	11	11
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1641 cd/sqm



TEST NUMBER: P1062010

CATALOG NUMBER: S125RDR-H375D835-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.2	7.1
10°-20°	76.1	18.6
20°-30°	97.8	23.9
30°-40°	92.0	22.5
40°-50°	64.3	15.7
50°-60°	34.4	8.4
60°-70°	13.7	3.3
70°-80°	1.8	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°	203.1	49.6
0°-40°	295.2	72.1
0°-60°	393.9	96.2
0°-90°	409.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	409.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	317	317	317	317	317	
5°	315	314	309	310	309	30
15°	299	290	268	255	251	84
25°	266	242	206	184	175	122
35°	220	185	140	108	97	137
45°	168	126	74	36	23	130
55°	113	69	17	6	5	100
65°	54	21	3	2	1	53
75°	4	1	0	0	0	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1062010

CATALOG NUMBER: S125RDR-H375D835-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	316.9	316.9	316.9	316.9	316.9
2.5°	316.5	316.9	314.0	316.5	316.9
5°	315.2	314.4	309.4	310.2	309.4
7.5°	312.7	310.6	302.3	299.3	297.7
10°	309.8	305.2	292.6	286.4	283.4
12.5°	305.2	298.5	280.9	271.3	267.1
15°	299.3	289.7	268.0	255.4	251.3
17.5°	292.2	279.7	254.6	239.1	232.9
20°	284.3	267.6	239.1	220.7	212.8
22.5°	275.1	255.9	223.2	202.8	194.8
25°	265.9	242.5	206.5	183.9	174.7
27.5°	254.6	228.7	189.8	165.6	155.5
30°	243.3	214.9	173.1	146.7	136.3
32.5°	232.0	200.2	156.4	127.1	116.6
35°	220.3	185.2	139.6	107.9	96.6
37.5°	207.8	170.1	121.7	89.5	77.8
40°	194.8	155.5	105.4	71.5	58.5
42.5°	182.3	140.9	89.0	53.9	39.7
45°	168.5	126.3	73.6	35.5	23.4
47.5°	155.5	112.0	57.7	20.5	12.1
50°	140.9	97.4	42.6	10.9	7.9
52.5°	127.1	83.2	28.4	7.1	6.3
55°	113.3	69.4	16.7	5.9	5.0
57.5°	97.4	56.0	9.2	4.6	3.8
60°	83.6	43.9	6.3	3.3	2.9
62.5°	67.7	32.2	4.6	2.5	2.1
65°	53.5	21.3	3.3	1.7	1.3
67.5°	39.7	12.5	2.1	0.8	0.8
70°	26.3	6.7	1.3	0.4	0.4
72.5°	13.8	2.9	0.8	0.4	0.4
75°	4.2	1.3	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



TEST NUMBER: P1062010
 CATALOG NUMBER: S125RDR-H375D835-X4F0-XX-UDD-BVL-B

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	11.65	12.92	12.02	13.23	13.54	0.00	0.00	0.00	0.00	0.00
	3H	12.24	13.35	12.62	13.68	14.04	0.00	0.00	0.00	0.00	0.00
	4H	12.20	13.23	12.60	13.58	13.97	0.00	0.00	0.00	0.00	0.00
	6H	12.11	13.06	12.53	13.43	13.83	0.00	0.00	0.00	0.00	0.00
	8H	12.07	12.96	12.50	13.35	13.76	0.00	0.00	0.00	0.00	0.00
	12H	12.02	12.88	12.46	13.26	13.69	0.00	0.00	0.00	0.00	0.00
4H	2H	11.43	12.46	11.83	12.81	13.19	0.00	0.00	0.00	0.00	0.00
	3H	12.02	12.85	12.43	13.26	13.66	0.00	0.00	0.00	0.00	0.00
	4H	11.97	12.71	12.40	13.13	13.57	0.00	0.00	0.00	0.00	0.00
	6H	11.88	12.52	12.34	12.96	13.43	0.00	0.00	0.00	0.00	0.00
	8H	11.82	12.41	12.29	12.86	13.33	0.00	0.00	0.00	0.00	0.00
	12H	11.77	12.29	12.26	12.77	13.25	0.00	0.00	0.00	0.00	0.00
8H	4H	11.82	12.41	12.29	12.86	13.33	0.00	0.00	0.00	0.00	0.00
	6H	11.71	12.19	12.22	12.69	13.17	0.00	0.00	0.00	0.00	0.00
	8H	11.65	12.08	12.17	12.60	13.09	0.00	0.00	0.00	0.00	0.00
	12H	11.60	11.98	12.11	12.47	13.05	0.00	0.00	0.00	0.00	0.00
12H	4H	11.77	12.29	12.26	12.77	13.25	0.00	0.00	0.00	0.00	0.00
	6H	11.65	12.08	12.17	12.60	13.09	0.00	0.00	0.00	0.00	0.00
	8H	11.60	11.98	12.11	12.47	13.05	0.00	0.00	0.00	0.00	0.00