

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: P1062019

Luminaire Tested: S125RDR-H375D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062019
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-H375D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

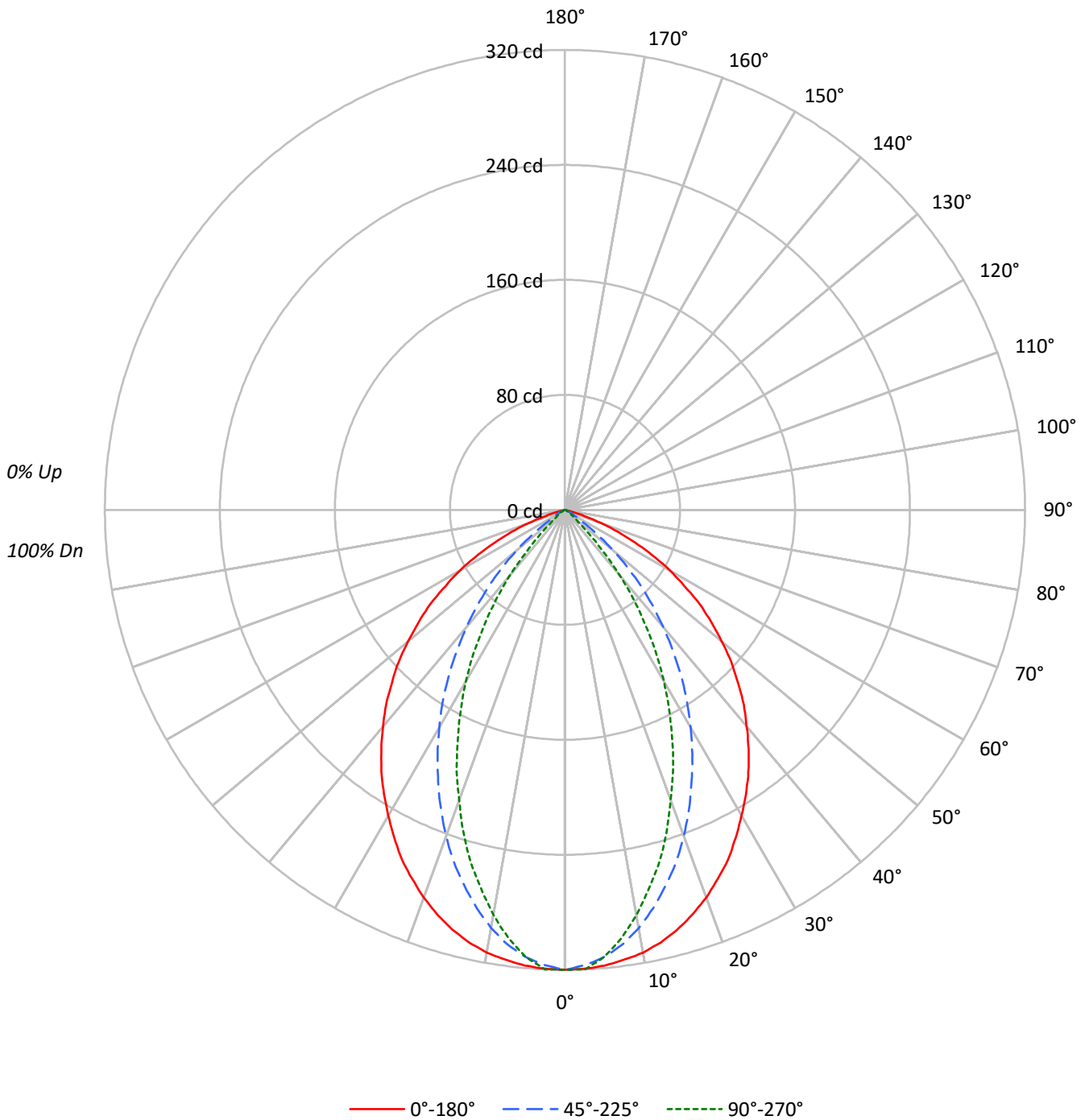
Lumens per Lamp: N/A
Luminaire Lumens: 413.4 lumens
Efficiency: N/A
Efficacy: 35.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	2203	2203	2203
5°	2200	2159	2159
10°	2187	2066	2001
15°	2155	1929	1808
20°	2104	1769	1575
25°	2040	1585	1341
30°	1953	1390	1094
35°	1870	1185	820
40°	1768	956	531
45°	1656	723	230
50°	1524	462	86
55°	1373	203	61
60°	1162	87	41
65°	880	55	21
70°	535	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: 1656 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.5	7.1
10°-20°	76.9	18.6
20°-30°	98.7	23.9
30°-40°	92.9	22.5
40°-50°	65.0	15.7
50°-60°	34.7	8.4
60°-70°	13.8	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°	205.1	49.6
0°-40°	298.1	72.1
0°-60°	397.8	96.2
0°-90°	413.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	413.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	320	320	320	320	320	
5°	318	318	312	313	312	30
15°	302	293	271	258	254	85
25°	268	245	209	186	176	123
35°	222	187	141	109	98	139
45°	170	128	74	36	24	131
55°	114	70	17	6	5	101
65°	54	22	3	2	1	54
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°	320.0	320.0	320.0	320.0	320.0
2.5°	319.6	320.0	317.1	319.6	320.0
5°	318.3	317.5	312.4	313.3	312.4
7.5°	315.8	313.7	305.2	302.3	300.6
10°	312.8	308.2	295.5	289.2	286.2
12.5°	308.2	301.4	283.7	274.0	269.8
15°	302.3	292.6	270.6	258.0	253.7
17.5°	295.1	282.4	257.1	241.5	235.2
20°	287.1	270.2	241.5	222.9	214.9
22.5°	277.8	258.4	225.4	204.8	196.7
25°	268.5	244.9	208.6	185.8	176.5
27.5°	257.1	230.9	191.7	167.2	157.1
30°	245.7	217.0	174.8	148.2	137.6
32.5°	234.3	202.2	157.9	128.3	117.8
35°	222.5	187.0	141.0	108.9	97.5
37.5°	209.8	171.8	122.9	90.3	78.5
40°	196.7	157.1	106.4	72.2	59.1
42.5°	184.1	142.3	89.9	54.5	40.1
45°	170.1	127.5	74.3	35.9	23.6
47.5°	157.1	113.1	58.3	20.7	12.2
50°	142.3	98.4	43.1	11.0	8.0
52.5°	128.3	84.0	28.7	7.2	6.3
55°	114.4	70.1	16.9	5.9	5.1
57.5°	98.4	56.6	9.3	4.6	3.8
60°	84.4	44.3	6.3	3.4	3.0
62.5°	68.4	32.5	4.6	2.5	2.1
65°	54.0	21.5	3.4	1.7	1.3
67.5°	40.1	12.7	2.1	0.8	0.8
70°	26.6	6.8	1.3	0.4	0.4
72.5°	13.9	3.0	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



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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	11.69	12.95	12.06	13.27	13.58	0.00	0.00	0.00	0.00	0.00
	3H	12.28	13.39	12.66	13.72	14.08	0.00	0.00	0.00	0.00	0.00
	4H	12.24	13.27	12.64	13.62	14.01	0.00	0.00	0.00	0.00	0.00
	6H	12.15	13.10	12.57	13.47	13.87	0.00	0.00	0.00	0.00	0.00
	8H	12.11	13.00	12.54	13.39	13.80	0.00	0.00	0.00	0.00	0.00
	12H	12.06	12.91	12.50	13.30	13.73	0.00	0.00	0.00	0.00	0.00
4H	2H	11.46	12.50	11.87	12.85	13.23	0.00	0.00	0.00	0.00	0.00
	3H	12.06	12.89	12.47	13.30	13.70	0.00	0.00	0.00	0.00	0.00
	4H	12.01	12.75	12.44	13.17	13.61	0.00	0.00	0.00	0.00	0.00
	6H	11.92	12.56	12.38	13.00	13.47	0.00	0.00	0.00	0.00	0.00
	8H	11.86	12.45	12.33	12.90	13.37	0.00	0.00	0.00	0.00	0.00
	12H	11.81	12.33	12.30	12.81	13.29	0.00	0.00	0.00	0.00	0.00
8H	4H	11.86	12.45	12.33	12.90	13.37	0.00	0.00	0.00	0.00	0.00
	6H	11.75	12.23	12.26	12.73	13.21	0.00	0.00	0.00	0.00	0.00
	8H	11.69	12.12	12.21	12.64	13.13	0.00	0.00	0.00	0.00	0.00
	12H	11.64	12.02	12.15	12.51	13.09	0.00	0.00	0.00	0.00	0.00
12H	4H	11.81	12.33	12.30	12.81	13.29	0.00	0.00	0.00	0.00	0.00
	6H	11.69	12.12	12.21	12.64	13.13	0.00	0.00	0.00	0.00	0.00
	8H	11.64	12.02	12.15	12.51	13.09	0.00	0.00	0.00	0.00	0.00