

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061440

Luminaire Tested: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061440
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

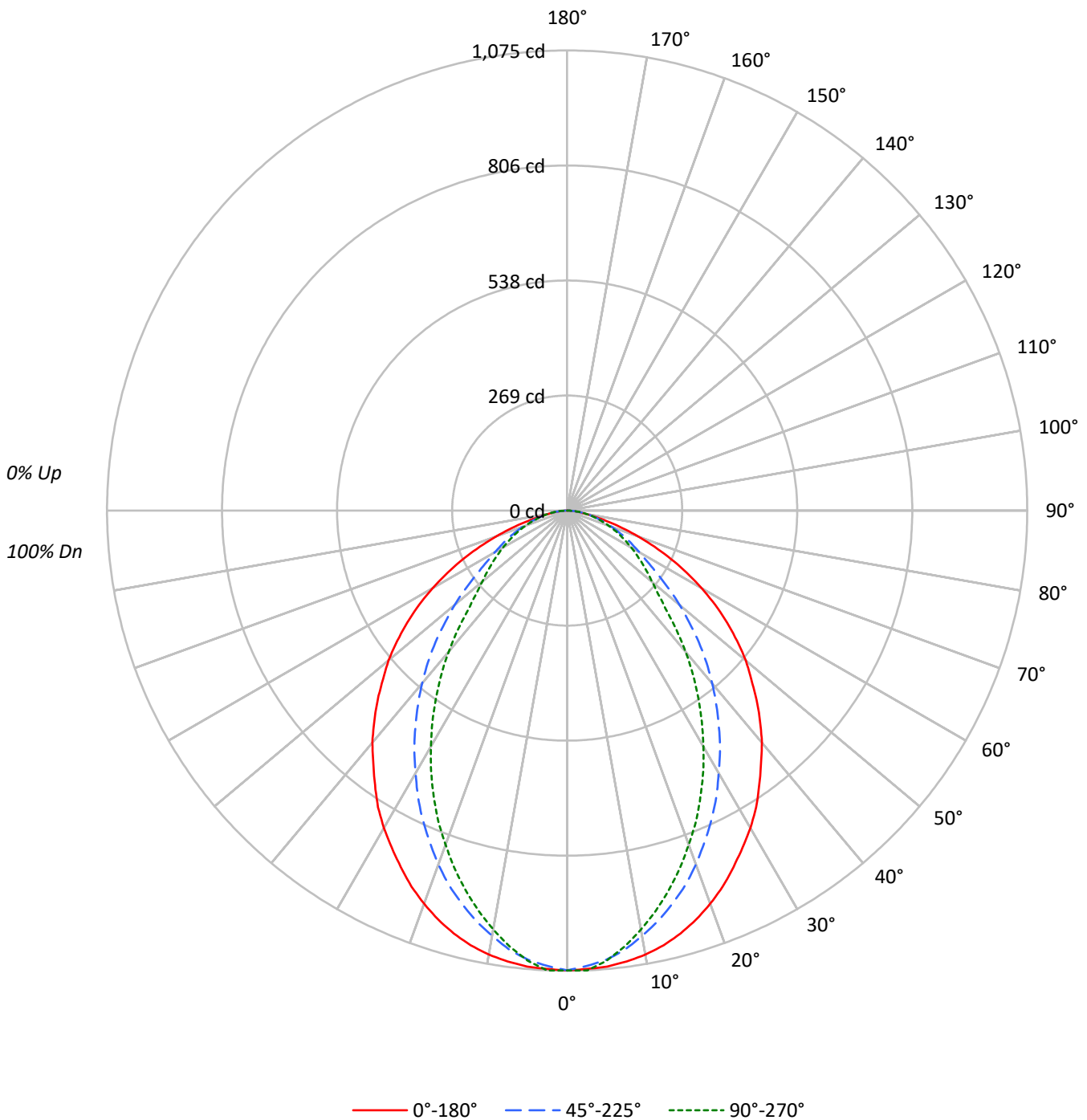
Lumens per Lamp: N/A
Luminaire Lumens: 2034.8 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1061440

CATALOG NUMBER: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061440

CATALOG NUMBER: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																												
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																												
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65																												
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57																												
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50																												
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45																												
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40																												
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36																												
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33																												
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7395	7395	7395
5°	7392	7279	7295
10°	7363	7053	6947
15°	7291	6775	6542
20°	7161	6443	6084
25°	6982	6060	5600
30°	6806	5628	5063
35°	6578	5195	4489
40°	6363	4738	3868
45°	6098	4236	3168
50°	5833	3673	2773
55°	5474	3066	2562
60°	4995	2682	2393
65°	4369	2450	2224
70°	3545	2206	2065
75°	2543	2016	1923
80°	1757	1804	1804
85°	1288	1564	1659

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6098 cd/sqm



TEST NUMBER: P1061440

CATALOG NUMBER: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	4.9
10°-20°	270.1	13.3
20°-30°	373.4	18.3
30°-40°	397.7	19.5
40°-50°	349.3	17.2
50°-60°	264.9	13.0
60°-70°	172.0	8.5
70°-80°	85.2	4.2
80°-90°	22.3	1.1
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°	743.3	36.5
0°-40°	1141.0	56.1
0°-60°	1755.3	86.3
0°-90°	2034.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2034.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1070	1067	1053	1057	1056	102
15°	1023	1000	950	928	918	288
25°	919	869	798	757	737	423
35°	783	710	618	562	534	490
45°	626	539	435	357	325	483
55°	456	366	255	220	213	407
65°	268	199	150	139	136	265
75°	96	84	76	74	72	107
85°	16	19	20	20	21	20
90°	0	0	0	0	0	

TEST NUMBER: P1061440

CATALOG NUMBER: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1071.8	1074.1	1064.8	1073.0	1075.3
5°	1069.5	1067.1	1053.1	1056.6	1055.5
7.5°	1062.5	1057.8	1034.5	1032.1	1027.5
10°	1053.1	1041.5	1008.8	1000.7	993.7
12.5°	1040.3	1021.6	982.0	965.7	957.5
15°	1022.8	999.5	950.5	928.3	917.8
17.5°	1001.8	969.2	917.8	887.5	875.9
20°	977.3	938.8	879.4	844.4	830.4
22.5°	950.5	905.0	838.5	801.2	786.1
25°	919.0	868.9	797.7	756.9	737.1
27.5°	887.5	831.5	754.6	709.1	688.1
30°	856.0	791.9	707.9	658.9	636.8
32.5°	822.2	751.1	664.8	611.1	585.5
35°	782.6	710.3	618.1	562.1	534.1
37.5°	744.1	667.1	572.6	509.7	482.8
40°	707.9	626.3	527.2	458.3	430.4
42.5°	667.1	583.1	481.7	409.4	377.9
45°	626.3	538.8	435.0	356.9	325.4
47.5°	583.1	496.8	386.0	309.1	288.1
50°	544.6	453.7	342.9	272.9	258.9
52.5°	500.3	411.7	298.6	244.9	235.6
55°	456.0	366.2	255.4	220.4	213.4
57.5°	410.5	325.4	221.6	199.4	192.4
60°	362.7	283.4	194.8	177.3	173.8
62.5°	314.9	240.3	171.4	158.6	153.9
65°	268.2	199.4	150.4	138.8	136.5
67.5°	220.4	162.1	129.5	121.3	120.1
70°	176.1	131.8	109.6	105.0	102.6
72.5°	135.3	105.0	92.1	88.6	87.5
75°	95.6	84.0	75.8	73.5	72.3
77.5°	64.1	64.1	60.6	58.3	59.5
80°	44.3	46.7	45.5	45.5	45.5
82.5°	29.2	31.5	32.7	32.7	32.7
85°	16.3	18.7	19.8	19.8	21.0
87.5°	5.8	7.0	8.2	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061440
 CATALOG NUMBER: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-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	17.50	19.00	17.87	19.31	19.62	13.75	15.24	14.11	15.55	15.87
	3H	18.82	20.15	19.19	20.48	20.84	15.33	16.67	15.71	16.99	17.36
	4H	19.19	20.44	19.59	20.79	21.17	15.93	17.18	16.33	17.53	17.91
	6H	19.36	20.52	19.77	20.88	21.28	16.40	17.56	16.82	17.93	18.32
	8H	19.40	20.50	19.83	20.89	21.29	16.56	17.66	16.99	18.05	18.46
	12H	19.41	20.46	19.84	20.85	21.28	16.68	17.73	17.11	18.11	18.54
4H	2H	17.62	18.87	18.02	19.22	19.60	14.41	15.66	14.81	16.01	16.39
	3H	19.10	20.14	19.51	20.54	20.94	16.19	17.23	16.60	17.63	18.03
	4H	19.58	20.51	20.01	20.93	21.37	16.91	17.84	17.34	18.26	18.70
	6H	19.86	20.68	20.32	21.12	21.58	17.50	18.31	17.95	18.75	19.21
	8H	19.93	20.69	20.40	21.14	21.60	17.70	18.46	18.17	18.90	19.37
	12H	19.97	20.65	20.46	21.13	21.60	17.86	18.53	18.34	19.01	19.48
8H	4H	19.66	20.42	20.13	20.86	21.33	17.22	17.98	17.68	18.42	18.89
	6H	20.03	20.65	20.52	21.14	21.62	17.93	18.55	18.42	19.04	19.52
	8H	20.14	20.70	20.66	21.21	21.70	18.20	18.77	18.72	19.28	19.76
	12H	20.23	20.72	20.74	21.22	21.78	18.43	18.93	18.95	19.42	19.99
12H	4H	19.66	20.33	20.14	20.81	21.28	17.24	17.92	17.73	18.40	18.87
	6H	20.03	20.59	20.54	21.10	21.59	17.98	18.54	18.49	19.05	19.54
	8H	20.19	20.68	20.70	21.18	21.74	18.31	18.81	18.82	19.30	19.87