

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: P1059391

Luminaire Tested: S123RDRP-S775D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D940-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

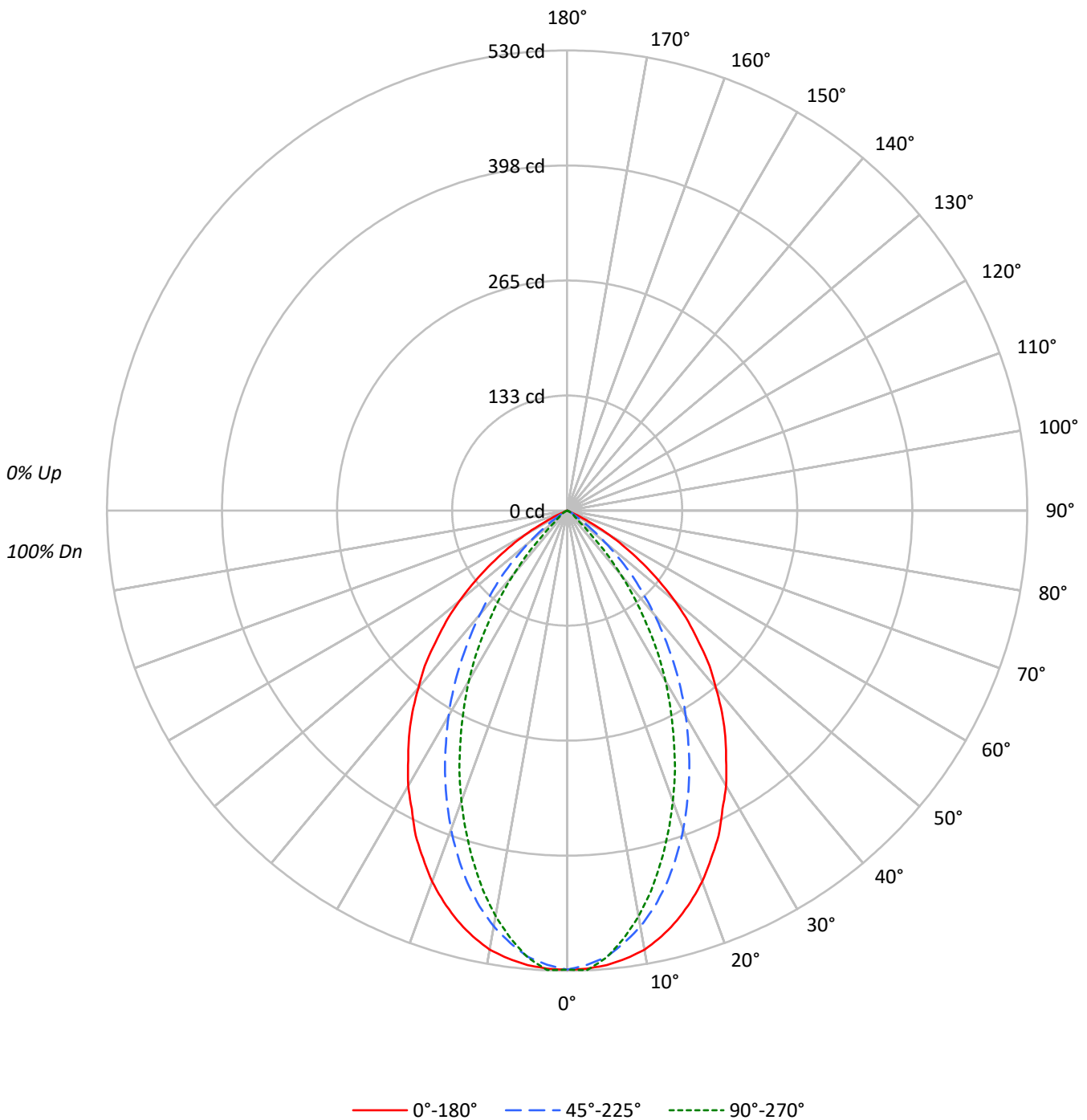
Lumens per Lamp: N/A
Luminaire Lumens: 603.5 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P1059391

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059391

CATALOG NUMBER: S123RDRP-S775D940-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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6209	6209	6209
5°	6193	6083	6093
10°	6123	5798	5655
15°	5942	5394	5083
20°	5682	4885	4449
25°	5351	4314	3763
30°	4965	3707	3071
35°	4553	3063	2282
40°	4085	2402	1462
45°	3564	1754	608
50°	2956	1043	234
55°	2178	436	174
60°	1320	160	101
65°	356	94	47
70°	0	31	31
75°	0	0	41
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3564 cd/sqm



TEST NUMBER: P1059391

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	8.1
10°-20°	125.6	20.8
20°-30°	156.6	25.9
30°-40°	140.0	23.2
40°-50°	88.4	14.6
50°-60°	37.0	6.1
60°-70°	7.0	1.2
70°-80°	0.2	0.0
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°	330.9	54.8
0°-40°	470.9	78.0
0°-60°	596.3	98.8
0°-90°	603.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	603.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	525	525	516	518	517	50
15°	489	477	444	425	418	137
25°	413	380	333	304	290	189
35°	318	272	214	175	159	198
45°	215	167	106	56	37	165
55°	106	73	21	8	8	95
65°	13	9	3	2	2	18
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1059391

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.8	528.8	528.8	528.8	528.8
2.5°	528.0	528.8	523.7	528.8	529.7
5°	525.4	524.6	516.1	517.8	516.9
7.5°	520.3	517.8	502.4	499.0	497.3
10°	513.5	506.7	486.3	477.7	474.3
12.5°	502.4	493.1	466.7	453.0	447.9
15°	488.8	476.9	443.7	424.9	418.1
17.5°	472.6	455.6	418.1	397.7	387.5
20°	454.7	430.9	390.9	366.2	356.0
22.5°	433.5	407.1	361.9	335.5	324.5
25°	413.0	379.8	333.0	304.0	290.4
27.5°	387.5	352.6	302.3	272.5	258.0
30°	366.2	326.2	273.4	240.1	226.5
32.5°	340.6	298.9	243.6	206.9	194.2
35°	317.6	271.7	213.7	175.4	159.2
37.5°	292.9	245.3	183.9	143.9	128.6
40°	266.5	218.9	156.7	112.4	95.4
42.5°	242.7	192.5	129.4	83.5	66.4
45°	214.6	166.9	105.6	56.2	36.6
47.5°	189.1	143.1	80.0	31.5	19.6
50°	161.8	118.4	57.1	16.2	12.8
52.5°	133.7	94.5	37.5	11.1	10.2
55°	106.4	73.2	21.3	8.5	8.5
57.5°	80.0	52.8	11.1	6.8	6.0
60°	56.2	34.9	6.8	5.1	4.3
62.5°	32.4	20.4	5.1	3.4	3.4
65°	12.8	9.4	3.4	1.7	1.7
67.5°	0.9	2.6	1.7	0.9	0.9
70°	0.0	0.0	0.9	0.9	0.9
72.5°	0.0	0.0	0.9	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.9
77.5°	0.0	0.0	0.0	0.0	0.0
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: P1059391

CATALOG NUMBER: S123RDRP-S775D940-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	11.53	12.71	11.90	13.02	13.34	0.00	0.00	0.00	0.00	0.00
	3H	11.37	12.41	11.76	12.74	13.10	0.00	0.00	0.00	0.00	0.00
	4H	11.29	12.24	11.69	12.59	12.98	0.00	0.00	0.00	0.00	0.00
	6H	11.20	12.07	11.61	12.44	12.84	0.00	0.00	0.00	0.00	0.00
	8H	11.15	11.97	11.58	12.36	12.77	0.00	0.00	0.00	0.00	0.00
	12H	11.10	11.88	11.53	12.26	12.69	0.00	0.00	0.00	0.00	0.00
4H	2H	11.29	12.25	11.70	12.60	12.99	0.00	0.00	0.00	0.00	0.00
	3H	11.13	11.90	11.54	12.30	12.71	0.00	0.00	0.00	0.00	0.00
	4H	11.02	11.71	11.46	12.13	12.57	0.00	0.00	0.00	0.00	0.00
	6H	10.93	11.51	11.39	11.96	12.43	0.00	0.00	0.00	0.00	0.00
	8H	10.86	11.41	11.34	11.86	12.33	0.00	0.00	0.00	0.00	0.00
	12H	10.80	11.28	11.29	11.77	12.24	0.00	0.00	0.00	0.00	0.00
8H	4H	10.86	11.41	11.34	11.86	12.33	0.00	0.00	0.00	0.00	0.00
	6H	10.75	11.19	11.25	11.69	12.17	0.00	0.00	0.00	0.00	0.00
	8H	10.67	11.07	11.20	11.59	12.08	0.00	0.00	0.00	0.00	0.00
	12H	10.62	10.97	11.14	11.47	12.04	0.00	0.00	0.00	0.00	0.00
12H	4H	10.81	11.28	11.29	11.77	12.24	0.00	0.00	0.00	0.00	0.00
	6H	10.67	11.07	11.20	11.59	12.08	0.00	0.00	0.00	0.00	0.00
	8H	10.62	10.97	11.14	11.47	12.04	0.00	0.00	0.00	0.00	0.00