

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: P624647

Luminaire Tested: S930DIP-W127-X2-U5LT-W

Issue Date: 11/3/2022

Test Information

Test Method: LM-79-2019
Report Number: P624647
Test Lab: INNOVATION CENTER-P3
Issue Date: 11/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S930DIP-W127-X2-U5LT-W
Description: NEO-RAY COVERA DIRECT/INDIRECT 2-FOOT LED WaveStream LUMINAIRE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

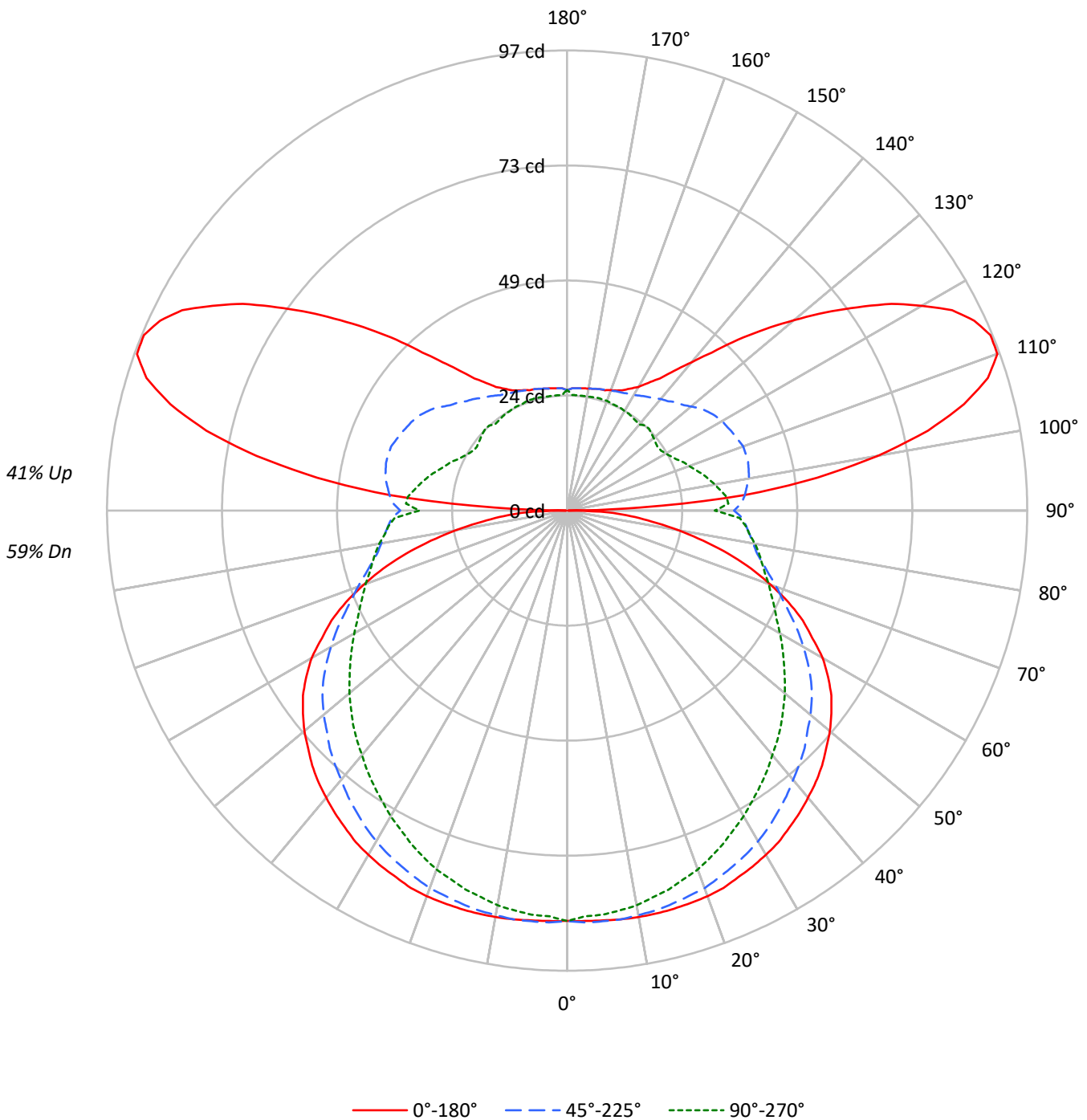
Lumens per Lamp: N/A
Luminaire Lumens: 608.2 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 1.44 / 1.28 / 1.52
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1.92' x H: 0.17')
CIE Type: General Diffuse

Input Watts (W): 9.2
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: P624647
CATALOG NUMBER: S930DIP-W127-X2-U5LT-W

Luminous Intensity Polar Plot





TEST NUMBER: P624647

CATALOG NUMBER: S930DIP-W127-X2-U5LT-W

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	109	109	109	109	102	102	102	102	88	88	88		76	76	76		64	64	64	59
1	97	92	87	82	90	85	81	77	74	70	67		63	60	58		53	51	49	44
2	87	78	71	65	81	73	67	61	63	58	53		54	50	46		45	42	39	35
3	79	68	60	53	73	63	56	50	55	49	44		46	42	38		39	35	32	28
4	72	60	51	44	66	56	48	42	48	42	37		41	36	32		34	30	27	24
5	66	53	44	37	61	49	41	35	43	36	31		36	31	27		31	26	23	20
6	61	47	38	32	56	44	36	30	38	32	27		33	27	23		28	23	20	17
7	56	43	34	28	52	40	32	26	35	28	23		30	24	20		25	21	18	15
8	52	38	30	24	48	36	28	23	31	25	21		27	22	18		23	19	16	13
9	48	35	27	22	45	33	26	21	29	23	18		25	20	16		21	17	14	12
10	45	32	24	19	42	30	23	18	26	20	16		23	18	15		20	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	729	729	729
5°	728	720	708
10°	733	711	692
15°	741	703	676
20°	752	699	661
25°	762	692	646
30°	776	688	632
35°	791	683	620
40°	810	679	612
45°	833	681	608
50°	859	684	605
55°	888	688	604
60°	911	686	609
65°	921	685	625
70°	907	698	660
75°	865	734	716
80°	773	821	807
85°	654	984	947

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 90°
 Luminance: 1560 cd/sqm



TEST NUMBER: P624647

CATALOG NUMBER: S930DIP-W127-X2-U5LT-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.3	1.4
10°-20°	24.2	4.0
20°-30°	38.0	6.2
30°-40°	48.3	7.9
40°-50°	54.4	8.9
50°-60°	55.7	9.2
60°-70°	51.5	8.5
70°-80°	43.3	7.1
80°-90°	35.8	5.9
90°-100°	41.2	6.8
100°-110°	51.8	8.5
110°-120°	49.2	8.1
120°-130°	38.5	6.3
130°-140°	27.2	4.5
140°-150°	18.6	3.1
150°-160°	12.5	2.1
160°-170°	7.4	1.2
170°-180°	2.5	0.4
<hr/>		
0°-30°	70.4	11.6
0°-40°	118.7	19.5
0°-60°	228.8	37.6
0°-90°	359.3	59.1
90°-120°	142.2	23.4
90°-150°	226.5	37.2
90°-180°	249.0	40.9
0°-180°	608.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	86	86	86	86	86	
5°	87	87	87	87	86	8
15°	87	87	86	85	83	25
25°	85	85	83	80	78	39
35°	82	80	78	74	71	51
45°	76	74	71	67	64	59
55°	68	65	63	59	56	61
65°	55	54	52	51	48	54
75°	35	38	43	44	42	37
85°	14	29	38	39	38	13
90°	0	33	35	33	31	3
95°	38	46	38	35	34	36
105°	87	68	40	32	30	90
115°	95	72	39	29	26	93
125°	75	59	36	27	23	67
135°	51	43	32	27	24	40
145°	34	32	29	26	24	22
155°	28	28	27	26	24	13
165°	26	26	26	26	25	8
175°	26	26	26	26	24	2
180°	25	25	25	25	25	



TEST NUMBER: P624647

CATALOG NUMBER: S930DIP-W127-X2-U5LT-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	86.5	86.5	86.5	86.5	86.5
2.5°	86.6	86.7	86.9	86.9	85.6
5°	86.7	86.8	86.9	86.8	85.5
7.5°	86.9	86.8	86.9	86.5	85.0
10°	87.0	86.9	86.6	86.1	84.5
12.5°	87.0	86.8	86.3	85.3	83.5
15°	86.9	86.6	85.8	84.6	82.7
17.5°	86.7	86.4	85.2	83.6	81.5
20°	86.5	86.0	84.7	82.8	80.5
22.5°	86.1	85.3	83.7	81.6	79.1
25°	85.3	84.6	82.7	80.2	77.6
27.5°	84.6	83.7	81.7	78.8	75.9
30°	83.8	82.7	80.5	77.3	74.4
32.5°	82.9	81.6	79.1	75.8	72.6
35°	81.6	80.2	77.5	74.2	70.9
37.5°	80.4	78.9	75.9	72.5	69.2
40°	79.0	77.3	74.1	70.6	67.3
42.5°	77.6	75.7	72.5	69.1	65.6
45°	76.0	73.8	70.8	67.2	63.8
47.5°	74.1	71.9	68.7	65.3	61.8
50°	72.3	70.1	67.0	63.3	59.9
52.5°	70.2	67.9	65.0	61.2	57.8
55°	68.0	65.4	62.8	59.2	55.8
57.5°	65.2	63.0	60.2	56.9	53.8
60°	62.2	60.1	57.5	54.7	51.8
62.5°	58.3	57.1	54.8	52.6	49.8
65°	54.8	54.0	51.9	50.6	48.2
67.5°	50.5	50.7	49.2	48.7	46.6
70°	45.6	46.8	46.9	47.0	45.2
72.5°	40.7	42.4	44.6	45.2	43.7
75°	35.2	37.8	42.6	43.9	42.5
77.5°	29.4	33.5	40.9	42.7	41.4
80°	23.8	30.5	39.8	41.4	40.2
82.5°	18.0	29.0	38.8	39.9	38.8
85°	13.5	29.1	37.9	38.6	37.8
87.5°	8.7	30.4	37.0	37.2	36.4
90°	0.2	32.6	35.2	32.7	31.1
92.5°	15.4	38.8	36.8	35.0	34.0
95°	37.7	45.5	37.6	34.7	33.7
97.5°	53.2	52.4	38.2	34.0	32.6
100°	66.5	58.4	38.9	33.4	31.6
102.5°	77.9	63.9	39.2	32.6	30.6
105°	86.6	68.4	39.5	31.8	29.6
107.5°	93.0	71.7	39.5	31.0	28.4
110°	96.5	73.8	39.5	30.2	27.4



TEST NUMBER: P624647

CATALOG NUMBER: S930DIP-W127-X2-U5LT-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	96.6	73.8	39.0	29.2	26.6
115°	94.7	72.3	38.6	28.6	25.5
117.5°	91.5	69.9	38.1	27.7	24.7
120°	86.3	66.9	37.7	27.2	24.0
122.5°	81.1	63.2	37.1	27.0	23.5
125°	74.7	59.3	36.3	26.9	23.3
127.5°	68.6	55.2	35.4	27.0	23.5
130°	62.4	51.1	34.1	27.3	23.8
132.5°	56.6	46.6	33.0	27.4	24.1
135°	50.9	42.9	32.3	27.2	24.4
137.5°	45.2	39.5	31.3	26.6	24.3
140°	40.8	36.7	30.7	26.4	23.7
142.5°	37.1	34.3	29.9	26.5	23.8
145°	34.0	32.5	29.3	26.5	24.0
147.5°	31.9	31.0	28.7	26.5	24.2
150°	30.1	29.7	28.1	26.4	24.2
152.5°	29.0	28.8	27.8	26.4	24.4
155°	28.0	28.0	27.4	26.3	24.4
157.5°	27.4	27.4	27.2	26.2	24.4
160°	27.0	27.1	26.9	26.2	24.6
162.5°	26.6	26.7	26.7	26.1	24.6
165°	26.5	26.5	26.5	26.0	24.6
167.5°	26.3	26.3	26.3	25.9	24.5
170°	26.1	26.1	26.1	25.8	24.4
172.5°	26.0	25.9	25.9	25.7	24.4
175°	25.9	25.9	25.9	25.7	24.4
177.5°	25.8	25.8	25.8	25.6	24.4
180°	25.4	25.4	25.4	25.4	25.4



TEST NUMBER: P624647

CATALOG NUMBER: S930DIP-W127-X2-U5LT-W

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	8.05	9.09	8.91	9.99	11.12	7.69	8.73	8.55	9.63	10.75
	3H	10.24	11.18	11.10	12.09	13.24	10.35	11.30	11.21	12.20	13.35
	4H	11.06	11.97	11.94	12.87	14.03	11.72	12.62	12.60	13.53	14.69
	6H	11.68	12.52	12.58	13.43	14.61	13.20	14.04	14.09	14.95	16.13
	8H	11.89	12.70	12.80	13.63	14.81	13.97	14.77	14.87	15.70	16.88
	12H	12.05	12.82	12.96	13.74	14.95	14.79	15.56	15.70	16.48	17.69
4H	2H	8.71	9.61	9.60	10.52	11.68	8.43	9.34	9.32	10.25	11.41
	3H	11.14	11.92	12.04	12.85	14.03	11.31	12.08	12.21	13.02	14.20
	4H	12.14	12.86	13.05	13.79	14.99	12.84	13.56	13.75	14.49	15.69
	6H	12.94	13.57	13.86	14.53	15.73	14.50	15.13	15.42	16.09	17.29
	8H	13.25	13.85	14.18	14.80	16.01	15.37	15.97	16.30	16.92	18.13
	12H	13.49	14.03	14.44	15.00	16.22	16.30	16.84	17.25	17.81	19.03
8H	4H	12.71	13.30	13.63	14.25	15.47	13.30	13.89	14.22	14.84	16.06
	6H	13.76	14.27	14.72	15.26	16.47	15.19	15.69	16.14	16.68	17.90
	8H	14.25	14.70	15.21	15.68	16.91	16.22	16.68	17.18	17.66	18.89
	12H	14.67	15.08	15.64	16.05	17.33	17.35	17.75	18.31	18.72	20.00
12H	4H	12.85	13.39	13.80	14.36	15.58	13.35	13.90	14.30	14.86	16.09
	6H	14.05	14.50	15.01	15.48	16.71	15.34	15.79	16.29	16.77	18.00
	8H	14.65	15.06	15.62	16.03	17.31	16.46	16.86	17.42	17.84	19.11