

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: P624675

Luminaire Tested: S930DIP-W240-X2-U5LT-W

Issue Date: 11/3/2022

Test Information

Test Method: LM-79-2019
Report Number: P624675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35531-R2)
Test Lab: INNOVATION CENTER
Issue Date: 11/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S930DIP-W240-X2-U5LT-W
Description: NEO-RAY COVERA DIRECT/INDIRECT 2-FOOT LED WaveStream LUMINAIRE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

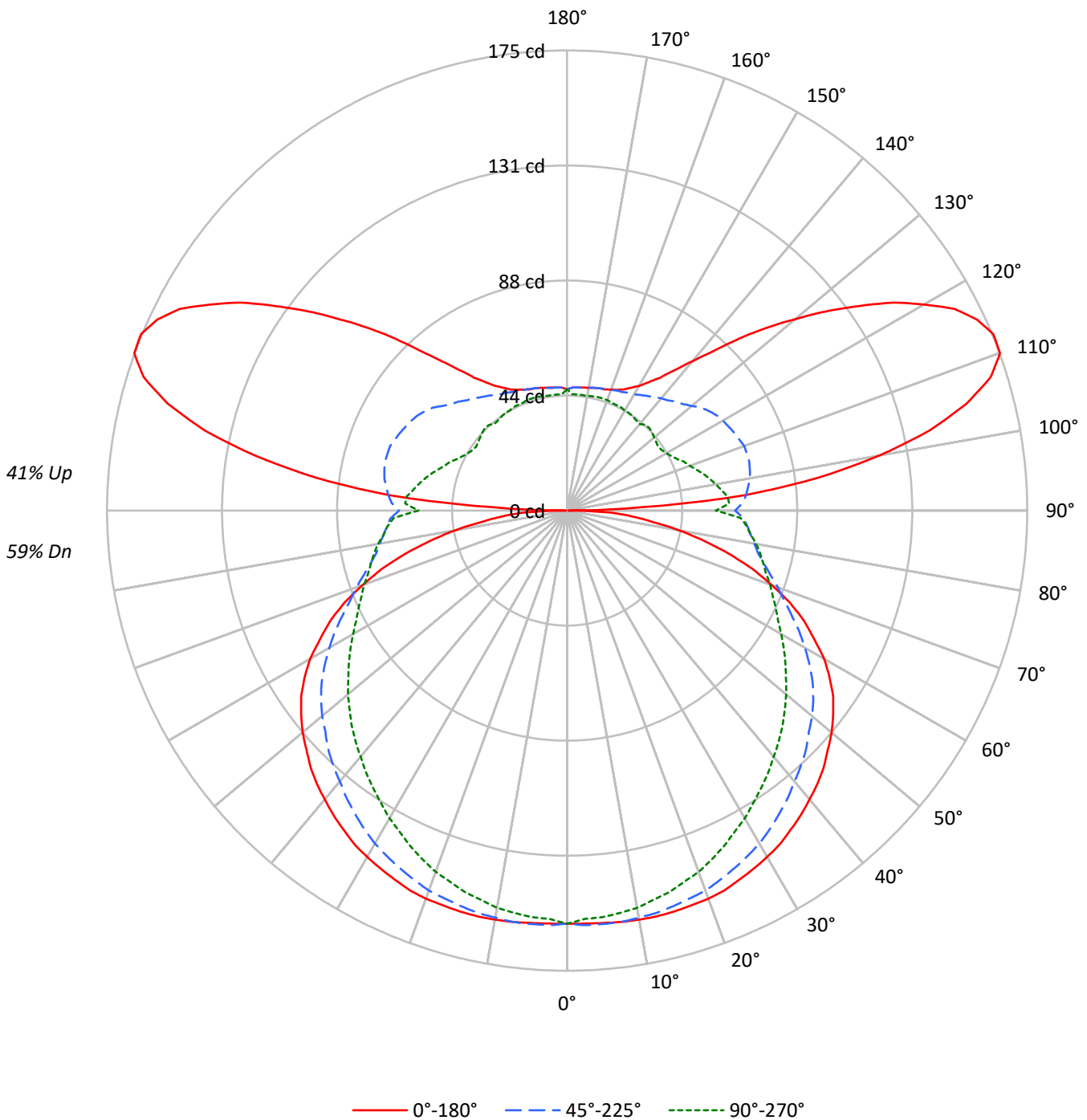
Lumens per Lamp: N/A
Luminaire Lumens: 1104.3 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.44 / 1.28 / 1.52
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1.92' x H: 0.17')
CIE Type: General Diffuse

Input Watts (W): 11.6
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	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°	1323	1323	1323
5°	1321	1307	1284
10°	1331	1290	1257
15°	1345	1277	1228
20°	1365	1269	1201
25°	1384	1256	1173
30°	1409	1250	1148
35°	1437	1240	1126
40°	1470	1233	1111
45°	1513	1236	1104
50°	1559	1241	1099
55°	1613	1249	1096
60°	1653	1245	1105
65°	1672	1243	1135
70°	1646	1268	1199
75°	1570	1332	1300
80°	1404	1492	1465
85°	1188	1786	1719

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 90°
 Luminance: 2833 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.0	1.4
10°-20°	43.9	4.0
20°-30°	69.0	6.2
30°-40°	87.7	7.9
40°-50°	98.7	8.9
50°-60°	101.1	9.2
60°-70°	93.5	8.5
70°-80°	78.6	7.1
80°-90°	64.9	5.9
90°-100°	74.8	6.8
100°-110°	94.0	8.5
110°-120°	89.4	8.1
120°-130°	70.0	6.3
130°-140°	49.4	4.5
140°-150°	33.7	3.0
150°-160°	22.8	2.1
160°-170°	13.5	1.2
170°-180°	4.5	0.4
0°-30°	127.8	11.6
0°-40°	215.5	19.5
0°-60°	415.4	37.6
0°-90°	652.4	59.1
90°-120°	258.1	23.4
90°-150°	411.2	37.2
90°-180°	452.0	40.9
0°-180°	1104.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	157	157	157	157	157	
5°	157	158	158	158	155	15
15°	158	157	156	154	150	45
25°	155	154	150	146	141	72
35°	148	146	141	135	129	93
45°	138	134	128	122	116	107
55°	124	119	114	108	101	110
65°	100	98	94	92	88	98
75°	64	69	77	80	77	67
85°	24	53	69	70	69	24
90°	0	59	64	59	56	6
95°	68	83	68	63	61	65
105°	157	124	72	58	54	163
115°	172	131	70	52	46	169
125°	136	108	66	49	42	122
135°	92	78	59	49	44	72
145°	62	59	53	48	44	40
155°	51	51	50	48	44	24
165°	48	48	48	47	45	14
175°	47	47	47	47	44	4
180°	46	46	46	46	46	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	157.1	157.1	157.1	157.1	157.1
2.5°	157.2	157.4	157.8	157.8	155.4
5°	157.4	157.6	157.8	157.6	155.2
7.5°	157.8	157.6	157.8	157.1	154.3
10°	158.0	157.8	157.2	156.3	153.4
12.5°	158.0	157.6	156.7	154.9	151.6
15°	157.8	157.2	155.8	153.6	150.2
17.5°	157.4	156.9	154.7	151.8	148.0
20°	157.1	156.1	153.8	150.3	146.2
22.5°	156.3	154.9	152.0	148.2	143.6
25°	154.9	153.6	150.2	145.6	140.9
27.5°	153.6	152.0	148.3	143.1	137.8
30°	152.1	150.2	146.2	140.3	135.1
32.5°	150.5	148.2	143.6	137.6	131.8
35°	148.2	145.6	140.7	134.7	128.7
37.5°	146.0	143.3	137.8	131.6	125.6
40°	143.4	140.3	134.5	128.2	122.2
42.5°	140.9	137.4	131.6	125.5	119.1
45°	138.0	134.0	128.5	122.0	115.8
47.5°	134.5	130.5	124.7	118.6	112.2
50°	131.3	127.3	121.6	114.9	108.8
52.5°	127.5	123.3	118.0	111.1	104.9
55°	123.5	118.7	114.0	107.5	101.3
57.5°	118.4	114.4	109.3	103.3	97.7
60°	112.9	109.1	104.4	99.3	94.0
62.5°	105.9	103.7	99.5	95.5	90.4
65°	99.5	98.0	94.2	91.9	87.5
67.5°	91.7	92.1	89.3	88.4	84.6
70°	82.8	85.0	85.2	85.3	82.1
72.5°	73.9	77.0	81.0	82.1	79.3
75°	63.9	68.6	77.3	79.7	77.2
77.5°	53.4	60.8	74.3	77.5	75.2
80°	43.2	55.4	72.3	75.2	73.0
82.5°	32.7	52.7	70.4	72.4	70.4
85°	24.5	52.8	68.8	70.1	68.6
87.5°	15.8	55.2	67.2	67.5	66.1
90°	0.4	59.2	63.9	59.4	56.5
92.5°	28.0	70.4	66.8	63.5	61.7
95°	68.4	82.6	68.3	63.0	61.2
97.5°	96.6	95.1	69.4	61.7	59.2
100°	120.7	106.0	70.6	60.6	57.4
102.5°	141.4	116.0	71.2	59.2	55.6
105°	157.2	124.2	71.7	57.7	53.7
107.5°	168.9	130.2	71.7	56.3	51.6
110°	175.2	134.0	71.7	54.8	49.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.4	134.0	70.8	53.0	48.3
115°	171.9	131.3	70.1	51.9	46.3
117.5°	166.1	126.9	69.2	50.3	44.8
120°	156.7	121.5	68.4	49.4	43.6
122.5°	147.2	114.7	67.4	49.0	42.7
125°	135.6	107.7	65.9	48.8	42.3
127.5°	124.6	100.2	64.3	49.0	42.7
130°	113.3	92.8	61.9	49.6	43.2
132.5°	102.8	84.6	59.9	49.7	43.8
135°	92.4	77.9	58.6	49.4	44.3
137.5°	82.1	71.7	56.8	48.3	44.1
140°	74.1	66.6	55.7	47.9	43.0
142.5°	67.4	62.3	54.3	48.1	43.2
145°	61.7	59.0	53.2	48.1	43.6
147.5°	57.9	56.3	52.1	48.1	43.9
150°	54.7	53.9	51.0	47.9	43.9
152.5°	52.7	52.3	50.5	47.9	44.3
155°	50.8	50.8	49.7	47.8	44.3
157.5°	49.7	49.7	49.4	47.6	44.3
160°	49.0	49.2	48.8	47.6	44.7
162.5°	48.3	48.5	48.5	47.4	44.7
165°	48.1	48.1	48.1	47.2	44.7
167.5°	47.8	47.8	47.8	47.0	44.5
170°	47.4	47.4	47.4	46.8	44.3
172.5°	47.2	47.0	47.0	46.7	44.3
175°	47.0	47.0	47.0	46.7	44.3
177.5°	46.8	46.8	46.8	46.5	44.3
180°	46.1	46.1	46.1	46.1	46.1



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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	10.12	11.17	10.98	12.06	13.19	9.76	10.80	10.62	11.70	12.83
	3H	12.31	13.26	13.18	14.16	15.31	12.42	13.37	13.29	14.27	15.42
	4H	13.13	14.04	14.02	14.94	16.11	13.79	14.69	14.67	15.60	16.76
	6H	13.75	14.59	14.65	15.51	16.68	15.27	16.11	16.17	17.03	18.20
	8H	13.97	14.77	14.87	15.70	16.88	16.04	16.85	16.94	17.78	18.95
	12H	14.12	14.89	15.03	15.81	17.02	16.86	17.63	17.77	18.56	19.76
4H	2H	10.78	11.68	11.67	12.59	13.75	10.51	11.41	11.39	12.32	13.48
	3H	13.21	13.99	14.11	14.93	16.10	13.38	14.16	14.28	15.09	16.27
	4H	14.21	14.93	15.12	15.86	17.06	14.91	15.63	15.82	16.56	17.76
	6H	15.02	15.65	15.94	16.60	17.80	16.58	17.21	17.50	18.16	19.36
	8H	15.33	15.92	16.25	16.87	18.09	17.45	18.04	18.37	18.99	20.21
	12H	15.56	16.10	16.51	17.07	18.29	18.37	18.91	19.32	19.88	21.10
8H	4H	14.78	15.37	15.70	16.32	17.54	15.37	15.96	16.29	16.91	18.13
	6H	15.84	16.34	16.79	17.33	18.55	17.26	17.77	18.21	18.76	19.97
	8H	16.32	16.78	17.28	17.75	18.99	18.30	18.75	19.26	19.73	20.96
	12H	16.74	17.15	17.71	18.12	19.40	19.42	19.82	20.38	20.80	22.07
12H	4H	14.92	15.47	15.87	16.43	17.66	15.43	15.97	16.37	16.93	18.16
	6H	16.12	16.58	17.08	17.55	18.79	17.41	17.86	18.37	18.84	20.07
	8H	16.73	17.13	17.69	18.10	19.38	18.53	18.94	19.50	19.91	21.19