

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P534513

Luminaire Tested: **S920DIP-W540-XX4XX-UDD-W-PC**

Issue Date: 6/9/2021

Test Information

Test Method: LM-79-08
Report Number: P534513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29792)
Test Lab: INNOVATION CENTER
Issue Date: 6/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S920DIP-W540-XX4XX-UDD-W-PC
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE
WHITE RECTANCULAR HOUSING WITH PERFORATED UPLIGHT COVER
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

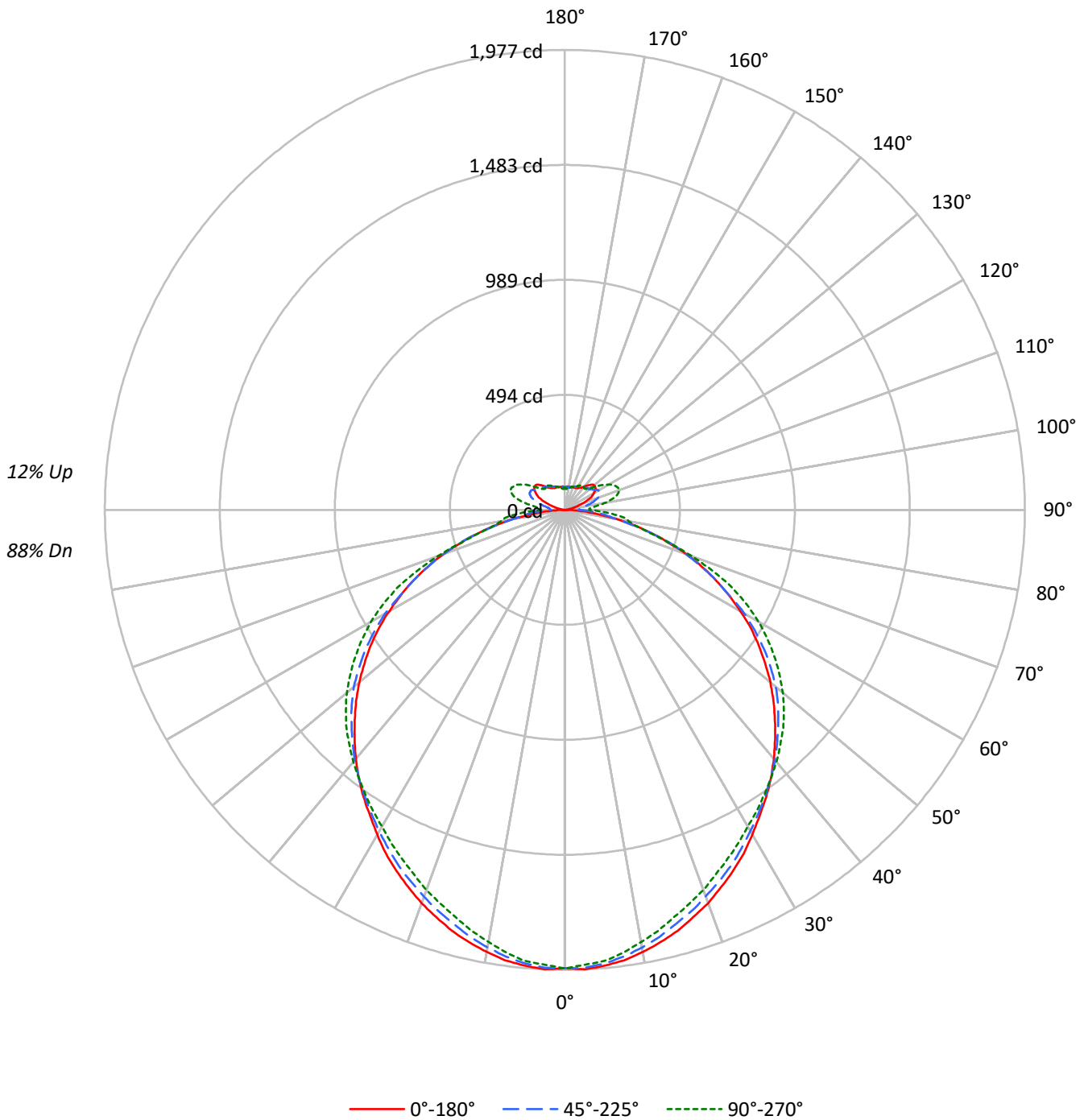
Lumens per Lamp: N/A
Luminaire Lumens: 6444.1 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')
CIE Type: Semi-Direct

Input Watts (W): 68
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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	88
1	106	101	96	92	102	97	93	90	91	88	85	85	82	80	79	77	75	73
2	96	87	81	75	92	85	78	73	79	74	69	74	70	66	69	66	63	60
3	87	77	68	62	84	74	67	61	69	63	58	65	60	55	61	57	53	50
4	80	68	59	52	76	66	57	51	61	55	49	58	52	47	54	49	45	43
5	73	60	51	45	70	58	50	44	55	48	42	52	46	41	49	43	39	37
6	67	54	45	39	65	53	44	38	50	42	37	47	40	36	44	39	34	32
7	62	49	40	34	60	48	39	34	45	38	33	42	36	31	40	35	30	28
8	58	45	36	30	56	43	35	30	41	34	29	39	33	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	29	25	23
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7826	7826	7826
5°	7790	7554	7465
10°	7680	7224	7044
15°	7547	6885	6644
20°	7399	6578	6307
25°	7244	6297	5985
30°	7077	6010	5708
35°	6938	5761	5495
40°	6805	5533	5306
45°	6658	5293	5123
50°	6524	5046	4900
55°	6355	4709	4613
60°	6106	4287	4272
65°	5784	3730	3777
70°	5299	3157	2975
75°	4593	2438	2116
80°	3521	1614	1776
85°	1948	1267	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.0	2.9
10°-20°	519.5	8.1
20°-30°	775.9	12.0
30°-40°	939.4	14.6
40°-50°	1001.4	15.5
50°-60°	937.4	14.5
60°-70°	729.6	11.3
70°-80°	406.3	6.3
80°-90°	156.9	2.4
90°-100°	76.1	1.2
100°-110°	135.8	2.1
110°-120°	167.0	2.6
120°-130°	144.1	2.2
130°-140°	104.8	1.6
140°-150°	76.2	1.2
150°-160°	50.7	0.8
160°-170°	28.7	0.4
170°-180°	9.3	0.1
0°-30°	1480.4	23.0
0°-40°	2419.9	37.6
0°-60°	4358.7	67.6
0°-90°	5651.5	87.7
90°-120°	378.8	5.9
90°-150°	704.0	10.9
90°-180°	793.0	12.3
0°-180°	6444.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1967	1954	1957	1950	1947	187
15°	1873	1853	1843	1823	1813	528
25°	1712	1699	1689	1662	1655	789
35°	1508	1505	1501	1494	1494	944
45°	1277	1277	1297	1317	1327	986
55°	1019	1019	1046	1076	1099	909
65°	717	714	717	774	794	708
75°	385	375	382	375	372	406
85°	80	94	147	188	204	95
90°	0	30	60	87	104	5
95°	7	37	67	97	121	8
105°	47	74	121	191	228	52
115°	121	121	168	214	241	116
125°	161	151	151	171	181	142
135°	151	137	134	127	127	117
145°	117	117	121	127	127	74
155°	104	104	111	114	111	49
165°	100	100	100	100	100	29
175°	100	97	97	97	90	10
180°	97	97	97	97	97	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1970.4	1970.4	1970.4	1970.4	1970.4
2.5°	1977.1	1963.7	1970.4	1967.0	1957.0
5°	1967.0	1953.6	1957.0	1950.3	1946.9
7.5°	1953.6	1936.9	1936.9	1926.8	1920.1
10°	1930.2	1913.4	1910.1	1893.3	1886.6
12.5°	1903.4	1886.6	1879.9	1859.8	1853.1
15°	1873.2	1853.1	1843.1	1822.9	1812.9
17.5°	1836.3	1819.6	1809.5	1786.1	1776.0
20°	1799.5	1782.7	1769.3	1745.9	1739.2
22.5°	1755.9	1739.2	1729.1	1702.3	1695.6
25°	1712.4	1699.0	1688.9	1662.1	1655.4
27.5°	1665.4	1652.0	1642.0	1621.9	1615.2
30°	1611.8	1605.1	1595.1	1575.0	1571.6
32.5°	1558.2	1554.9	1548.2	1534.8	1534.8
35°	1508.0	1504.6	1501.2	1494.5	1494.5
37.5°	1454.3	1451.0	1454.3	1451.0	1454.3
40°	1397.4	1394.0	1404.1	1407.4	1414.1
42.5°	1337.0	1337.0	1350.5	1363.9	1370.6
45°	1276.7	1276.7	1296.8	1316.9	1327.0
47.5°	1216.4	1216.4	1243.2	1263.3	1276.7
50°	1152.7	1152.7	1182.9	1206.4	1223.1
52.5°	1085.7	1085.7	1115.9	1146.0	1162.8
55°	1018.7	1018.7	1045.5	1075.7	1099.1
57.5°	948.3	948.3	968.4	1008.7	1032.1
60°	871.3	874.6	891.4	934.9	961.7
62.5°	794.2	794.2	797.5	857.9	881.3
65°	717.1	713.8	717.1	774.1	794.2
67.5°	636.7	630.0	633.3	690.3	690.3
70°	552.9	542.9	552.9	583.1	576.4
72.5°	465.8	455.7	475.8	472.5	465.8
75°	385.4	375.3	382.0	375.3	372.0
77.5°	301.6	294.9	291.5	294.9	304.9
80°	221.2	224.5	221.2	258.0	278.1
82.5°	144.1	150.8	177.6	234.6	258.0
85°	80.4	93.8	147.4	187.7	204.4
87.5°	30.2	60.3	97.2	130.7	147.4
90°	0.0	30.2	60.3	87.1	103.9
92.5°	3.4	30.2	63.7	87.1	103.9
95°	6.7	36.9	67.0	97.2	120.6
97.5°	10.1	43.6	73.7	117.3	144.1
100°	20.1	50.3	87.1	144.1	177.6
102.5°	33.5	60.3	103.9	170.9	204.4
105°	46.9	73.7	120.6	191.0	227.9
107.5°	63.7	83.8	137.4	204.4	241.3
110°	83.8	97.2	150.8	211.1	248.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	107.2	160.8	214.5	248.0
115°	120.6	120.6	167.6	214.5	241.3
117.5°	134.0	130.7	167.6	211.1	234.6
120°	144.1	140.7	167.6	204.4	217.8
122.5°	154.1	147.4	160.8	187.7	201.1
125°	160.8	150.8	150.8	170.9	181.0
127.5°	164.2	150.8	144.1	154.1	160.8
130°	164.2	150.8	137.4	137.4	147.4
132.5°	160.8	144.1	137.4	127.3	134.0
135°	150.8	137.4	134.0	127.3	127.3
137.5°	140.7	130.7	130.7	127.3	124.0
140°	130.7	127.3	127.3	127.3	127.3
142.5°	120.6	120.6	124.0	127.3	127.3
145°	117.3	117.3	120.6	127.3	127.3
147.5°	110.6	110.6	117.3	124.0	124.0
150°	107.2	110.6	113.9	120.6	120.6
152.5°	107.2	107.2	110.6	117.3	113.9
155°	103.9	103.9	110.6	113.9	110.6
157.5°	103.9	103.9	107.2	110.6	110.6
160°	103.9	100.5	103.9	107.2	103.9
162.5°	103.9	100.5	103.9	103.9	103.9
165°	100.5	100.5	100.5	100.5	100.5
167.5°	100.5	100.5	97.2	100.5	97.2
170°	100.5	97.2	97.2	97.2	93.8
172.5°	100.5	97.2	97.2	97.2	93.8
175°	100.5	97.2	97.2	97.2	90.5
177.5°	97.2	97.2	97.2	97.2	90.5
180°	97.2	97.2	97.2	97.2	97.2

(END OF REPORT)