

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: P534503

Luminaire Tested: **S920DIP-W435-XX4XX-UDD-W**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534503  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29790)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S920DIP-W435-XX4XX-UDD-W  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE RECTANCULAR HOUSING  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

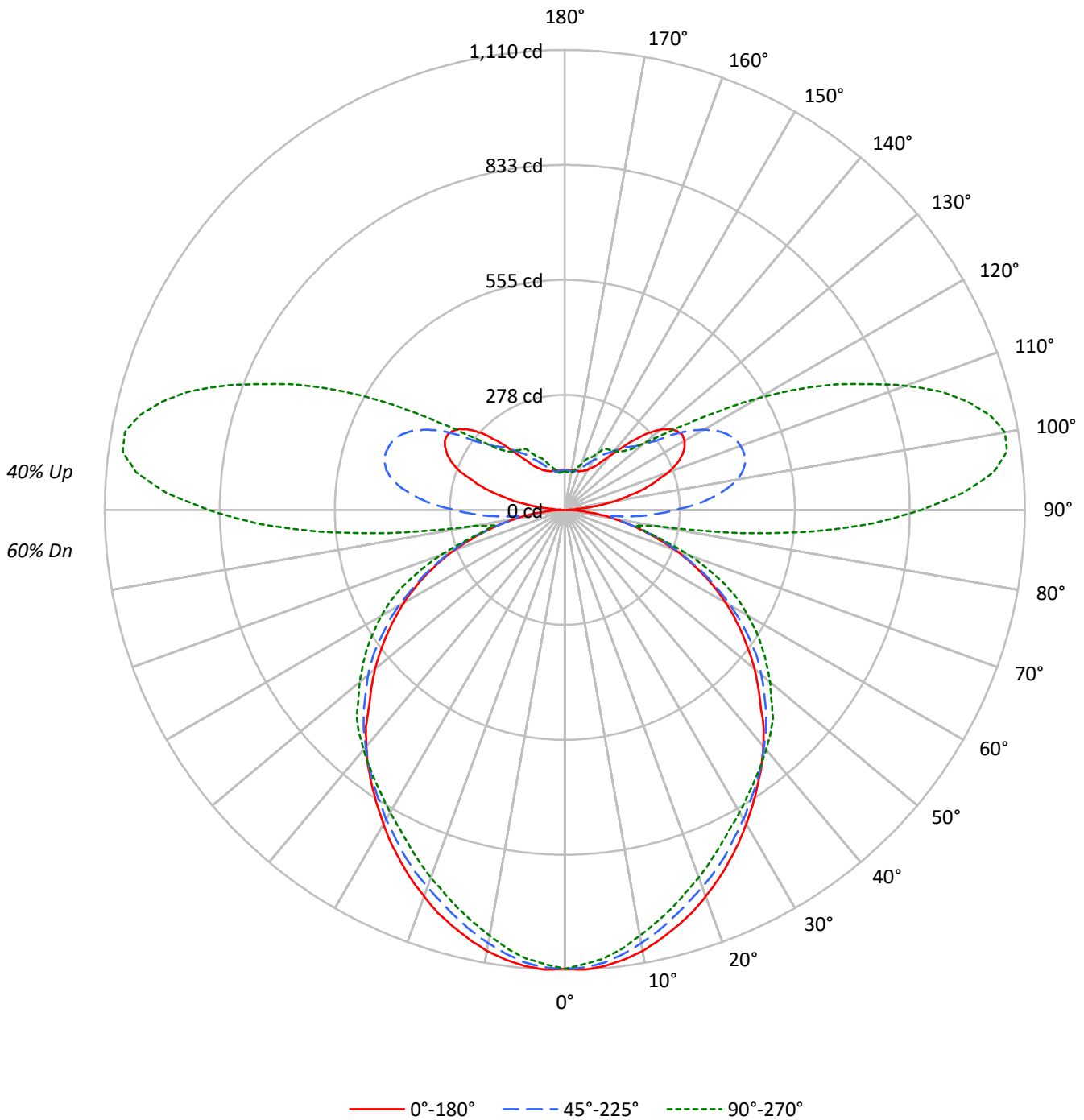
Lumens per Lamp: N/A  
Luminaire Lumens: 5383.0 lumens  
Efficiency: N/A  
Efficacy: 106.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.32  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: General Diffuse

Input Watts (W): 50.7  
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: P534503  
CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W

### Luminous Intensity Polar Plot





TEST NUMBER: P534503

CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-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	89	89	89	76	76	76	65	65	65	60
1	98	93	89	85	91	87	83	79	75	72	70	65	62	60	55	53	52	47
2	89	81	74	68	83	76	70	64	66	61	57	56	53	50	48	45	43	39
3	81	71	63	57	75	66	59	54	58	52	48	50	45	42	42	39	36	32
4	74	63	54	48	69	59	51	45	51	45	40	44	39	36	38	34	31	28
5	68	56	47	41	63	52	45	39	46	39	35	40	35	31	34	30	27	24
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24	21
7	58	45	37	31	54	42	35	29	37	31	27	32	27	24	28	24	21	18
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19	16
9	50	37	30	24	47	35	28	23	31	25	21	27	22	19	24	20	17	15
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	22	18	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4400	4400	4400
5°	4377	4235	4166
10°	4302	4018	3897
15°	4194	3799	3649
20°	4083	3602	3427
25°	3964	3424	3223
30°	3845	3249	3064
35°	3733	3094	2935
40°	3627	2945	2834
45°	3481	2800	2741
50°	3384	2642	2588
55°	3264	2453	2442
60°	3143	2221	2265
65°	2971	1958	2031
70°	2712	1646	1640
75°	2323	1278	1154
80°	1870	858	1415
85°	1100	1492	4413



TEST NUMBER: P534503  
 CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.4	1.9
10°-20°	286.6	5.3
20°-30°	421.7	7.8
30°-40°	503.8	9.4
40°-50°	529.5	9.8
50°-60°	489.1	9.1
60°-70°	382.6	7.1
70°-80°	216.9	4.0
80°-90°	272.9	5.1
90°-100°	497.7	9.2
100°-110°	554.6	10.3
110°-120°	461.4	8.6
120°-130°	302.1	5.6
130°-140°	167.6	3.1
140°-150°	99.5	1.8
150°-160°	56.1	1.0
160°-170°	28.4	0.5
170°-180°	9.0	0.2
0°-30°	811.7	15.1
0°-40°	1315.5	24.4
0°-60°	2334.1	43.4
0°-90°	3206.5	59.6
90°-120°	1513.6	28.1
90°-150°	2082.8	38.7
90°-180°	2176.0	40.4
0°-180°	5383.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1105	1097	1097	1089	1086	105
15°	1041	1030	1017	1001	996	294
25°	937	929	918	900	892	432
35°	812	809	806	798	798	508
45°	667	670	686	702	710	518
55°	523	526	545	569	582	468
65°	368	366	376	416	427	363
75°	195	192	200	203	203	208
85°	45	59	174	448	601	53
90°	3	91	267	651	860	5
95°	43	152	360	804	1038	54
105°	200	254	451	814	1006	208
115°	312	312	432	609	715	305
125°	331	326	315	350	363	293
135°	240	222	214	192	200	186
145°	128	136	163	179	179	85
155°	104	104	120	134	139	49
165°	99	96	96	101	104	28
175°	96	96	93	93	91	9
180°	93	93	93	93	93	

TEST NUMBER: P534503

CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1110.5	1102.5	1105.1	1102.5	1097.1
5°	1105.1	1097.1	1097.1	1089.1	1086.5
7.5°	1094.5	1083.8	1081.1	1070.4	1067.8
10°	1081.1	1070.4	1062.4	1049.1	1043.7
12.5°	1062.4	1051.7	1041.1	1027.7	1019.7
15°	1041.1	1030.4	1017.0	1001.0	995.7
17.5°	1019.7	1006.4	993.0	977.0	969.0
20°	993.0	979.7	969.0	950.3	945.0
22.5°	966.3	955.7	945.0	923.6	918.3
25°	937.0	929.0	918.3	899.6	891.6
27.5°	907.6	899.6	888.9	872.9	864.9
30°	875.6	870.2	862.2	846.2	843.5
32.5°	843.5	840.9	832.9	822.2	819.5
35°	811.5	808.8	806.2	798.2	798.2
37.5°	779.5	776.8	776.8	774.1	776.8
40°	744.8	742.1	747.4	750.1	755.4
42.5°	710.1	710.1	718.1	728.8	734.1
45°	667.4	670.0	686.0	702.1	710.1
47.5°	632.7	635.3	651.3	670.0	675.4
50°	597.9	597.9	619.3	635.3	646.0
52.5°	560.6	563.2	584.6	603.3	614.0
55°	523.2	525.9	544.6	568.6	581.9
57.5°	485.8	485.8	504.5	531.2	547.2
60°	448.5	448.5	461.8	491.2	509.9
62.5°	408.4	408.4	416.4	456.5	472.5
65°	368.4	365.7	376.4	416.4	427.1
67.5°	325.7	323.0	331.0	371.0	373.7
70°	283.0	277.6	288.3	317.7	317.7
72.5°	237.6	234.9	248.3	258.9	253.6
75°	194.9	192.2	200.2	202.9	202.9
77.5°	154.8	154.8	154.8	160.2	173.5
80°	117.5	120.1	117.5	157.5	221.6
82.5°	82.8	82.8	112.1	309.7	429.8
85°	45.4	58.7	173.5	448.5	600.6
87.5°	18.7	66.7	224.2	557.9	744.8
90°	2.7	90.8	266.9	651.3	859.6
92.5°	16.0	125.5	320.3	742.1	963.7
95°	42.7	152.2	360.4	803.5	1038.4
97.5°	85.4	181.5	395.1	846.2	1075.8
100°	125.5	208.2	424.4	851.5	1078.4
102.5°	160.2	232.2	440.5	840.9	1051.7
105°	200.2	253.6	451.1	814.2	1006.4
107.5°	232.2	272.3	453.8	771.5	950.3
110°	266.9	283.0	451.1	720.7	875.6



TEST NUMBER: P534503

CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	293.6	296.3	445.8	662.0	792.8
115°	312.3	312.3	432.4	608.6	715.4
117.5°	325.7	328.3	413.8	555.2	627.3
120°	333.7	336.3	387.1	493.8	539.2
122.5°	336.3	333.7	355.0	421.8	445.8
125°	331.0	325.7	315.0	349.7	363.0
127.5°	320.3	307.0	272.3	288.3	299.0
130°	301.6	280.3	245.6	237.6	250.9
132.5°	274.9	250.9	226.9	208.2	216.2
135°	240.2	221.6	213.6	192.2	200.2
137.5°	202.9	194.9	200.2	192.2	189.5
140°	170.8	173.5	186.9	186.9	186.9
142.5°	146.8	154.8	173.5	184.2	181.5
145°	128.1	136.1	162.8	178.9	178.9
147.5°	120.1	122.8	146.8	162.8	173.5
150°	112.1	114.8	138.8	152.2	157.5
152.5°	106.8	109.4	128.1	144.1	144.1
155°	104.1	104.1	120.1	133.5	138.8
157.5°	101.4	101.4	112.1	125.5	130.8
160°	98.8	98.8	106.8	120.1	117.5
162.5°	98.8	96.1	101.4	109.4	109.4
165°	98.8	96.1	96.1	101.4	104.1
167.5°	98.8	96.1	93.4	96.1	96.1
170°	96.1	96.1	93.4	93.4	90.8
172.5°	96.1	96.1	96.1	93.4	90.8
175°	96.1	96.1	93.4	93.4	90.8
177.5°	96.1	96.1	96.1	93.4	90.8
180°	93.4	93.4	93.4	93.4	93.4

(END OF REPORT)