

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: P534501

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

Issue Date: 6/9/2021

Test Information

Test Method: LM-79-08
Report Number: P534501
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-W435-XX4XX-UDD-W-PC
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE
WHITE RECTANCULAR HOUSING WITH PERFORATED UPLIGHT COVER
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

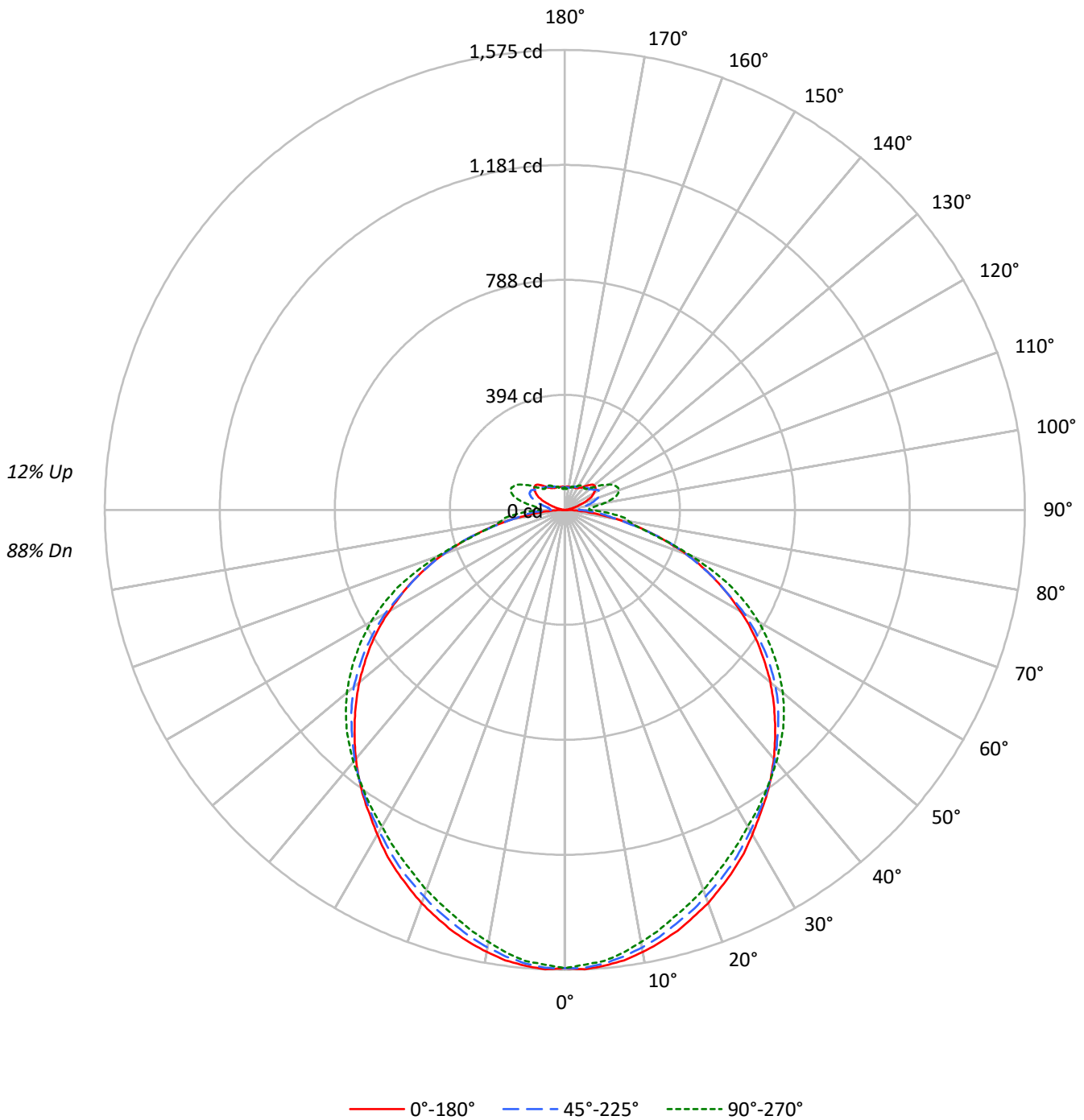
Lumens per Lamp: N/A
Luminaire Lumens: 5133.4 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')
CIE Type: Semi-Direct

Input Watts (W): 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: P534501
CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W-PC

Luminous Intensity Polar Plot





TEST NUMBER: P534501

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

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°	6234	6234	6234
5°	6206	6017	5947
10°	6118	5755	5611
15°	6012	5484	5293
20°	5894	5240	5024
25°	5771	5016	4768
30°	5638	4787	4547
35°	5526	4589	4378
40°	5421	4408	4227
45°	5304	4216	4081
50°	5197	4020	3903
55°	5062	3752	3675
60°	4864	3415	3403
65°	4608	2971	3009
70°	4222	2515	2369
75°	3659	1942	1685
80°	2804	1286	1415
85°	1553	1010	1196



TEST NUMBER: P534501
 CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W-PC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	2.9
10°-20°	413.8	8.1
20°-30°	618.1	12.0
30°-40°	748.4	14.6
40°-50°	797.8	15.5
50°-60°	746.7	14.5
60°-70°	581.2	11.3
70°-80°	323.6	6.3
80°-90°	125.0	2.4
90°-100°	60.6	1.2
100°-110°	108.2	2.1
110°-120°	133.0	2.6
120°-130°	114.8	2.2
130°-140°	83.5	1.6
140°-150°	60.7	1.2
150°-160°	40.4	0.8
160°-170°	22.9	0.4
170°-180°	7.4	0.1
0°-30°	1179.3	23.0
0°-40°	1927.7	37.6
0°-60°	3472.2	67.6
0°-90°	4502.0	87.7
90°-120°	301.8	5.9
90°-150°	560.8	10.9
90°-180°	631.0	12.3
0°-180°	5133.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1567	1556	1559	1554	1551	149
15°	1492	1476	1468	1452	1444	421
25°	1364	1353	1345	1324	1319	628
35°	1201	1199	1196	1191	1191	752
45°	1017	1017	1033	1049	1057	785
55°	812	812	833	857	876	724
65°	571	569	571	617	633	564
75°	307	299	304	299	296	323
85°	64	75	118	150	163	76
90°	0	24	48	69	83	4
95°	5	29	53	77	96	6
105°	37	59	96	152	182	41
115°	96	96	134	171	192	92
125°	128	120	120	136	144	113
135°	120	109	107	101	101	93
145°	93	93	96	101	101	59
155°	83	83	88	91	88	39
165°	80	80	80	80	80	23
175°	80	77	77	77	72	8
180°	77	77	77	77	77	



TEST NUMBER: P534501

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1569.6	1569.6	1569.6	1569.6	1569.6
2.5°	1575.0	1564.3	1569.6	1566.9	1558.9
5°	1566.9	1556.3	1558.9	1553.6	1550.9
7.5°	1556.3	1542.9	1542.9	1534.9	1529.6
10°	1537.6	1524.2	1521.6	1508.2	1502.9
12.5°	1516.2	1502.9	1497.5	1481.5	1476.2
15°	1492.2	1476.2	1468.2	1452.2	1444.2
17.5°	1462.8	1449.5	1441.5	1422.8	1414.8
20°	1433.5	1420.1	1409.4	1390.8	1385.4
22.5°	1398.8	1385.4	1377.4	1356.1	1350.7
25°	1364.1	1353.4	1345.4	1324.0	1318.7
27.5°	1326.7	1316.0	1308.0	1292.0	1286.7
30°	1284.0	1278.6	1270.6	1254.6	1252.0
32.5°	1241.3	1238.6	1233.3	1222.6	1222.6
35°	1201.2	1198.6	1195.9	1190.6	1190.6
37.5°	1158.5	1155.9	1158.5	1155.9	1158.5
40°	1113.1	1110.5	1118.5	1121.2	1126.5
42.5°	1065.1	1065.1	1075.8	1086.5	1091.8
45°	1017.0	1017.0	1033.1	1049.1	1057.1
47.5°	969.0	969.0	990.4	1006.4	1017.0
50°	918.3	918.3	942.3	961.0	974.3
52.5°	864.9	864.9	888.9	912.9	926.3
55°	811.5	811.5	832.9	856.9	875.6
57.5°	755.4	755.4	771.5	803.5	822.2
60°	694.0	696.7	710.1	744.8	766.1
62.5°	632.7	632.7	635.3	683.4	702.1
65°	571.3	568.6	571.3	616.6	632.7
67.5°	507.2	501.8	504.5	549.9	549.9
70°	440.5	432.4	440.5	464.5	459.1
72.5°	371.0	363.0	379.1	376.4	371.0
75°	307.0	299.0	304.3	299.0	296.3
77.5°	240.2	234.9	232.2	234.9	242.9
80°	176.2	178.9	176.2	205.5	221.6
82.5°	114.8	120.1	141.5	186.9	205.5
85°	64.1	74.7	117.5	149.5	162.8
87.5°	24.0	48.0	77.4	104.1	117.5
90°	0.0	24.0	48.0	69.4	82.8
92.5°	2.7	24.0	50.7	69.4	82.8
95°	5.3	29.4	53.4	77.4	96.1
97.5°	8.0	34.7	58.7	93.4	114.8
100°	16.0	40.0	69.4	114.8	141.5
102.5°	26.7	48.0	82.8	136.1	162.8
105°	37.4	58.7	96.1	152.2	181.5
107.5°	50.7	66.7	109.4	162.8	192.2
110°	66.7	77.4	120.1	168.2	197.5



TEST NUMBER: P534501
 CATALOG NUMBER: S920DIP-W435-XX4XX-UDD-W-PC

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	80.1	85.4	128.1	170.8	197.5
115°	96.1	96.1	133.5	170.8	192.2
117.5°	106.8	104.1	133.5	168.2	186.9
120°	114.8	112.1	133.5	162.8	173.5
122.5°	122.8	117.5	128.1	149.5	160.2
125°	128.1	120.1	120.1	136.1	144.1
127.5°	130.8	120.1	114.8	122.8	128.1
130°	130.8	120.1	109.4	109.4	117.5
132.5°	128.1	114.8	109.4	101.4	106.8
135°	120.1	109.4	106.8	101.4	101.4
137.5°	112.1	104.1	104.1	101.4	98.8
140°	104.1	101.4	101.4	101.4	101.4
142.5°	96.1	96.1	98.8	101.4	101.4
145°	93.4	93.4	96.1	101.4	101.4
147.5°	88.1	88.1	93.4	98.8	98.8
150°	85.4	88.1	90.8	96.1	96.1
152.5°	85.4	85.4	88.1	93.4	90.8
155°	82.8	82.8	88.1	90.8	88.1
157.5°	82.8	82.8	85.4	88.1	88.1
160°	82.8	80.1	82.8	85.4	82.8
162.5°	82.8	80.1	82.8	82.8	82.8
165°	80.1	80.1	80.1	80.1	80.1
167.5°	80.1	80.1	77.4	80.1	77.4
170°	80.1	77.4	77.4	77.4	74.7
172.5°	80.1	77.4	77.4	77.4	74.7
175°	80.1	77.4	77.4	77.4	72.1
177.5°	77.4	77.4	77.4	77.4	72.1
180°	77.4	77.4	77.4	77.4	77.4

(END OF REPORT)