

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: P534498

Luminaire Tested: **S920DIP-W430-XX4XX-UDD-W-PC**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534498  
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-W430-XX4XX-UDD-W-PC  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE RECTANCULAR HOUSING WITH PERFORATED UPLIGHT COVER  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

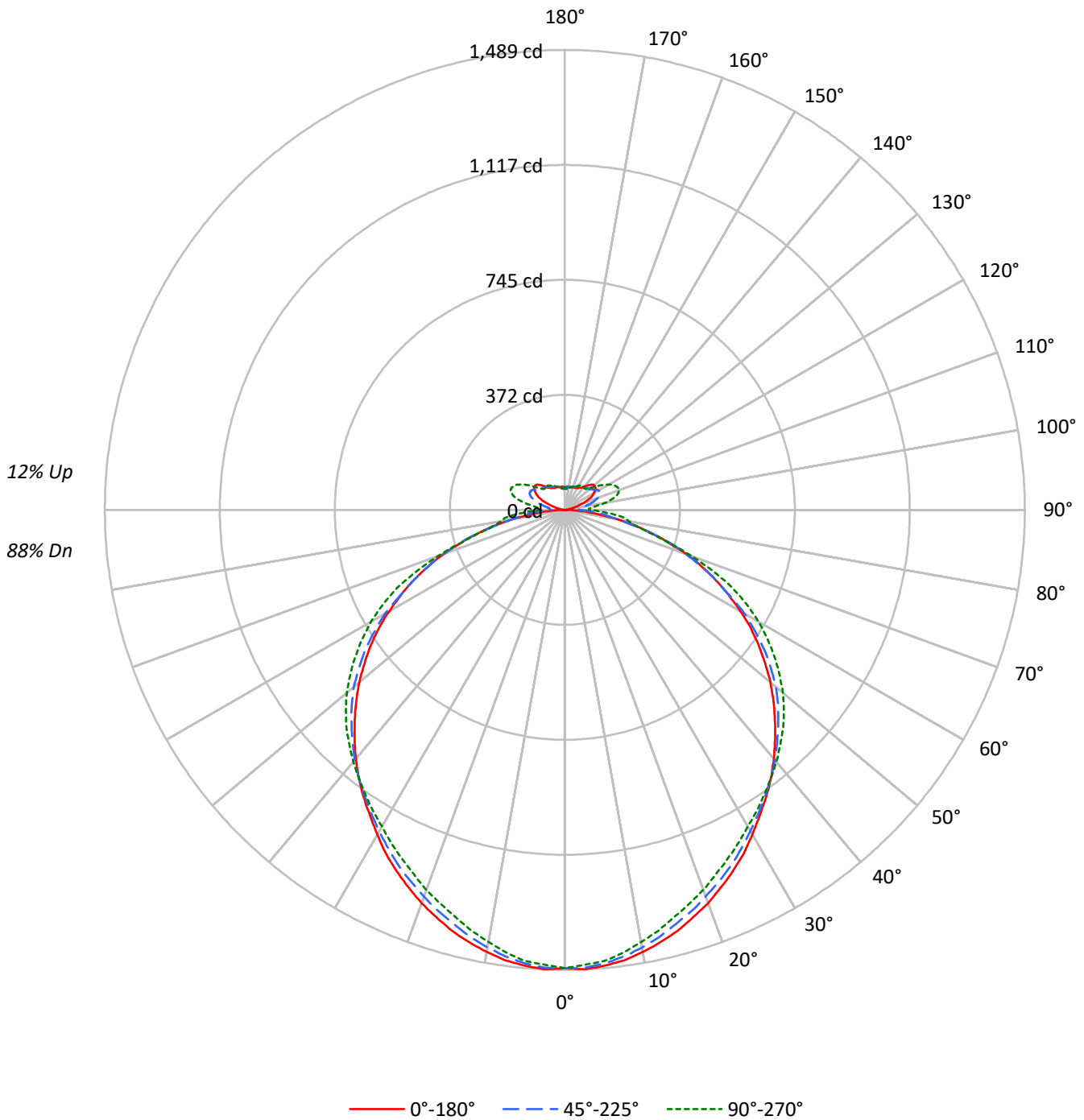
Lumens per Lamp: N/A  
Luminaire Lumens: 4853.4 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: Semi-Direct

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



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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°	5894	5894	5894
5°	5867	5689	5622
10°	5784	5441	5305
15°	5684	5185	5004
20°	5572	4954	4750
25°	5456	4742	4508
30°	5330	4526	4299
35°	5225	4339	4139
40°	5125	4167	3996
45°	5015	3986	3858
50°	4913	3801	3691
55°	4786	3547	3474
60°	4599	3228	3218
65°	4356	2809	2845
70°	3991	2378	2240
75°	3459	1836	1593
80°	2652	1216	1338
85°	1468	954	1132



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.4	2.9
10°-20°	391.2	8.1
20°-30°	584.4	12.0
30°-40°	707.5	14.6
40°-50°	754.2	15.5
50°-60°	706.0	14.5
60°-70°	549.5	11.3
70°-80°	306.0	6.3
80°-90°	118.1	2.4
90°-100°	57.3	1.2
100°-110°	102.3	2.1
110°-120°	125.8	2.6
120°-130°	108.6	2.2
130°-140°	78.9	1.6
140°-150°	57.4	1.2
150°-160°	38.2	0.8
160°-170°	21.6	0.4
170°-180°	7.0	0.1
0°-30°	1115.0	23.0
0°-40°	1822.5	37.6
0°-60°	3282.7	67.6
0°-90°	4256.4	87.7
90°-120°	285.3	5.9
90°-150°	530.2	10.9
90°-180°	597.0	12.3
0°-180°	4853.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1482	1471	1474	1469	1466	141
15°	1411	1396	1388	1373	1365	398
25°	1290	1280	1272	1252	1247	594
35°	1136	1133	1131	1126	1126	711
45°	962	962	977	992	999	742
55°	767	767	787	810	828	685
65°	540	538	540	583	598	533
75°	290	283	288	283	280	306
85°	61	71	111	141	154	72
90°	0	23	45	66	78	3
95°	5	28	50	73	91	6
105°	35	56	91	144	172	39
115°	91	91	126	162	182	87
125°	121	114	114	129	136	107
135°	114	104	101	96	96	88
145°	88	88	91	96	96	56
155°	78	78	83	86	83	37
165°	76	76	76	76	76	22
175°	76	73	73	73	68	7
180°	73	73	73	73	73	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1484.0	1484.0	1484.0	1484.0	1484.0
2.5°	1489.0	1478.9	1484.0	1481.5	1473.9
5°	1481.5	1471.4	1473.9	1468.8	1466.3
7.5°	1471.4	1458.8	1458.8	1451.2	1446.1
10°	1453.7	1441.1	1438.6	1425.9	1420.9
12.5°	1433.5	1420.9	1415.8	1400.7	1395.7
15°	1410.8	1395.7	1388.1	1372.9	1365.4
17.5°	1383.0	1370.4	1362.8	1345.2	1337.6
20°	1355.3	1342.7	1332.6	1314.9	1309.8
22.5°	1322.5	1309.8	1302.3	1282.1	1277.0
25°	1289.7	1279.6	1272.0	1251.8	1246.8
27.5°	1254.3	1244.2	1236.7	1221.5	1216.5
30°	1213.9	1208.9	1201.3	1186.2	1183.7
32.5°	1173.6	1171.0	1166.0	1155.9	1155.9
35°	1135.7	1133.2	1130.7	1125.6	1125.6
37.5°	1095.3	1092.8	1095.3	1092.8	1095.3
40°	1052.4	1049.9	1057.5	1060.0	1065.0
42.5°	1007.0	1007.0	1017.1	1027.2	1032.2
45°	961.6	961.6	976.7	991.9	999.4
47.5°	916.1	916.1	936.3	951.5	961.6
50°	868.2	868.2	890.9	908.6	921.2
52.5°	817.7	817.7	840.4	863.1	875.8
55°	767.2	767.2	787.4	810.1	827.8
57.5°	714.2	714.2	729.4	759.7	777.3
60°	656.2	658.7	671.3	704.1	724.3
62.5°	598.1	598.1	600.7	646.1	663.8
65°	540.1	537.6	540.1	583.0	598.1
67.5°	479.5	474.5	477.0	519.9	519.9
70°	416.4	408.9	416.4	439.1	434.1
72.5°	350.8	343.2	358.4	355.9	350.8
75°	290.2	282.7	287.7	282.7	280.1
77.5°	227.1	222.1	219.6	222.1	229.7
80°	166.6	169.1	166.6	194.3	209.5
82.5°	108.5	113.6	133.8	176.7	194.3
85°	60.6	70.7	111.0	141.3	154.0
87.5°	22.7	45.4	73.2	98.4	111.0
90°	0.0	22.7	45.4	65.6	78.2
92.5°	2.5	22.7	48.0	65.6	78.2
95°	5.0	27.8	50.5	73.2	90.9
97.5°	7.6	32.8	55.5	88.3	108.5
100°	15.1	37.9	65.6	108.5	133.8
102.5°	25.2	45.4	78.2	128.7	154.0
105°	35.3	55.5	90.9	143.9	171.6
107.5°	48.0	63.1	103.5	154.0	181.7
110°	63.1	73.2	113.6	159.0	186.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	75.7	80.8	121.1	161.5	186.8
115°	90.9	90.9	126.2	161.5	181.7
117.5°	101.0	98.4	126.2	159.0	176.7
120°	108.5	106.0	126.2	154.0	164.0
122.5°	116.1	111.0	121.1	141.3	151.4
125°	121.1	113.6	113.6	128.7	136.3
127.5°	123.7	113.6	108.5	116.1	121.1
130°	123.7	113.6	103.5	103.5	111.0
132.5°	121.1	108.5	103.5	95.9	101.0
135°	113.6	103.5	101.0	95.9	95.9
137.5°	106.0	98.4	98.4	95.9	93.4
140°	98.4	95.9	95.9	95.9	95.9
142.5°	90.9	90.9	93.4	95.9	95.9
145°	88.3	88.3	90.9	95.9	95.9
147.5°	83.3	83.3	88.3	93.4	93.4
150°	80.8	83.3	85.8	90.9	90.9
152.5°	80.8	80.8	83.3	88.3	85.8
155°	78.2	78.2	83.3	85.8	83.3
157.5°	78.2	78.2	80.8	83.3	83.3
160°	78.2	75.7	78.2	80.8	78.2
162.5°	78.2	75.7	78.2	78.2	78.2
165°	75.7	75.7	75.7	75.7	75.7
167.5°	75.7	75.7	73.2	75.7	73.2
170°	75.7	73.2	73.2	73.2	70.7
172.5°	75.7	73.2	73.2	73.2	70.7
175°	75.7	73.2	73.2	73.2	68.1
177.5°	73.2	73.2	73.2	73.2	68.1
180°	73.2	73.2	73.2	73.2	73.2

(END OF REPORT)