

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: P534515

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

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534515  
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-W540-XX4XX-UDD-W  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE RECTANCULAR HOUSING  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

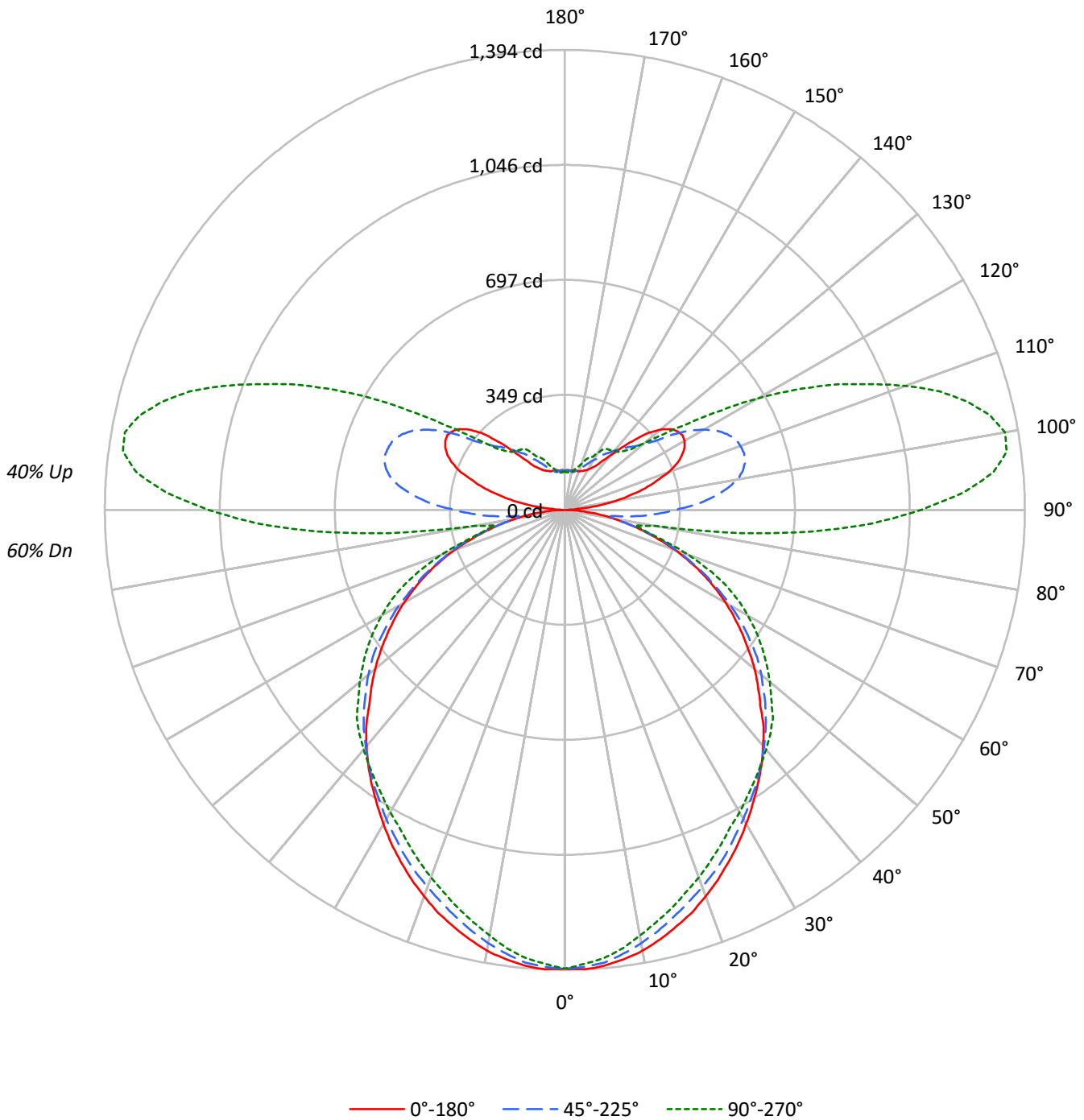
Lumens per Lamp: N/A  
Luminaire Lumens: 6757.4 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.32  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: General Diffuse

Input Watts (W): 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	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	39	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°	5524	5524	5524
5°	5494	5316	5230
10°	5400	5044	4892
15°	5265	4769	4581
20°	5125	4522	4302
25°	4976	4298	4046
30°	4826	4078	3846
35°	4687	3884	3684
40°	4553	3698	3558
45°	4369	3515	3441
50°	4248	3316	3249
55°	4097	3079	3066
60°	3946	2788	2843
65°	3729	2458	2550
70°	3404	2066	2058
75°	2915	1604	1449
80°	2346	1076	1776
85°	1381	1872	5541



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.8	1.9
10°-20°	359.8	5.3
20°-30°	529.4	7.8
30°-40°	632.4	9.4
40°-50°	664.7	9.8
50°-60°	614.0	9.1
60°-70°	480.3	7.1
70°-80°	272.3	4.0
80°-90°	342.6	5.1
90°-100°	624.7	9.2
100°-110°	696.2	10.3
110°-120°	579.2	8.6
120°-130°	379.2	5.6
130°-140°	210.4	3.1
140°-150°	125.0	1.8
150°-160°	70.5	1.0
160°-170°	35.7	0.5
170°-180°	11.3	0.2
0°-30°	1019.0	15.1
0°-40°	1651.4	24.4
0°-60°	2930.1	43.4
0°-90°	4025.3	59.6
90°-120°	1900.1	28.1
90°-150°	2614.6	38.7
90°-180°	2732.0	40.4
0°-180°	6757.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1387	1377	1377	1367	1364	131
15°	1307	1294	1277	1257	1250	369
25°	1176	1166	1153	1129	1119	542
35°	1019	1015	1012	1002	1002	638
45°	838	841	861	881	891	650
55°	657	660	684	714	730	588
65°	462	459	472	523	536	456
75°	245	241	251	255	255	261
85°	57	74	218	563	754	67
90°	3	114	335	818	1079	7
95°	54	191	452	1009	1304	68
105°	251	318	566	1022	1263	261
115°	392	392	543	764	898	383
125°	416	409	395	439	456	368
135°	302	278	268	241	251	234
145°	161	171	204	224	224	107
155°	131	131	151	168	174	61
165°	124	121	121	127	131	35
175°	121	121	117	117	114	12
180°	117	117	117	117	117	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1390.7	1390.7	1390.7	1390.7	1390.7
2.5°	1394.0	1384.0	1387.3	1384.0	1377.3
5°	1387.3	1377.3	1377.3	1367.2	1363.9
7.5°	1373.9	1360.5	1357.2	1343.8	1340.4
10°	1357.2	1343.8	1333.7	1316.9	1310.2
12.5°	1333.7	1320.3	1306.9	1290.1	1280.1
15°	1306.9	1293.5	1276.7	1256.6	1249.9
17.5°	1280.1	1263.3	1246.6	1226.5	1216.4
20°	1246.6	1229.8	1216.4	1193.0	1186.3
22.5°	1213.1	1199.7	1186.3	1159.4	1152.7
25°	1176.2	1166.1	1152.7	1129.3	1119.2
27.5°	1139.3	1129.3	1115.9	1095.8	1085.7
30°	1099.1	1092.4	1082.4	1062.3	1058.9
32.5°	1058.9	1055.6	1045.5	1032.1	1028.8
35°	1018.7	1015.4	1012.0	1002.0	1002.0
37.5°	978.5	975.1	975.1	971.8	975.1
40°	934.9	931.6	938.3	941.6	948.3
42.5°	891.4	891.4	901.4	914.8	921.5
45°	837.8	841.1	861.2	881.3	891.4
47.5°	794.2	797.5	817.6	841.1	847.8
50°	750.6	750.6	777.4	797.5	810.9
52.5°	703.7	707.1	733.9	757.3	770.7
55°	656.8	660.1	683.6	713.8	730.5
57.5°	609.9	609.9	633.3	666.8	687.0
60°	563.0	563.0	579.7	616.6	640.0
62.5°	512.7	512.7	522.8	573.0	593.1
65°	462.4	459.1	472.5	522.8	536.2
67.5°	408.8	405.5	415.5	465.8	469.1
70°	355.2	348.5	361.9	398.8	398.8
72.5°	298.2	294.9	311.6	325.0	318.3
75°	244.6	241.3	251.3	254.7	254.7
77.5°	194.4	194.4	194.4	201.1	217.8
80°	147.4	150.8	147.4	197.7	278.1
82.5°	103.9	103.9	140.7	388.7	539.5
85°	57.0	73.7	217.8	563.0	754.0
87.5°	23.5	83.8	281.5	700.4	934.9
90°	3.4	113.9	335.1	817.6	1079.0
92.5°	20.1	157.5	402.1	931.6	1209.7
95°	53.6	191.0	452.4	1008.7	1303.5
97.5°	107.2	227.9	495.9	1062.3	1350.5
100°	157.5	261.4	532.8	1069.0	1353.8
102.5°	201.1	291.5	552.9	1055.6	1320.3
105°	251.3	318.3	566.3	1022.1	1263.3
107.5°	291.5	341.8	569.7	968.4	1193.0
110°	335.1	355.2	566.3	904.8	1099.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	368.6	372.0	559.6	831.0	995.2
115°	392.1	392.1	542.9	764.0	898.1
117.5°	408.8	412.2	519.4	697.0	787.5
120°	418.9	422.2	485.9	619.9	676.9
122.5°	422.2	418.9	445.7	529.5	559.6
125°	415.5	408.8	395.4	439.0	455.7
127.5°	402.1	385.4	341.8	361.9	375.3
130°	378.7	351.9	308.3	298.2	315.0
132.5°	345.2	315.0	284.8	261.4	271.4
135°	301.6	278.1	268.1	241.3	251.3
137.5°	254.7	244.6	251.3	241.3	237.9
140°	214.5	217.8	234.6	234.6	234.6
142.5°	184.3	194.4	217.8	231.2	227.9
145°	160.8	170.9	204.4	224.5	224.5
147.5°	150.8	154.1	184.3	204.4	217.8
150°	140.7	144.1	174.3	191.0	197.7
152.5°	134.0	137.4	160.8	181.0	181.0
155°	130.7	130.7	150.8	167.6	174.3
157.5°	127.3	127.3	140.7	157.5	164.2
160°	124.0	124.0	134.0	150.8	147.4
162.5°	124.0	120.6	127.3	137.4	137.4
165°	124.0	120.6	120.6	127.3	130.7
167.5°	124.0	120.6	117.3	120.6	120.6
170°	120.6	120.6	117.3	117.3	113.9
172.5°	120.6	120.6	120.6	117.3	113.9
175°	120.6	120.6	117.3	117.3	113.9
177.5°	120.6	120.6	120.6	117.3	113.9
180°	117.3	117.3	117.3	117.3	117.3

(END OF REPORT)