

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: P534488

Luminaire Tested: **S920DIP-W240-XX4XX-UDD-W**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534488  
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-W240-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**

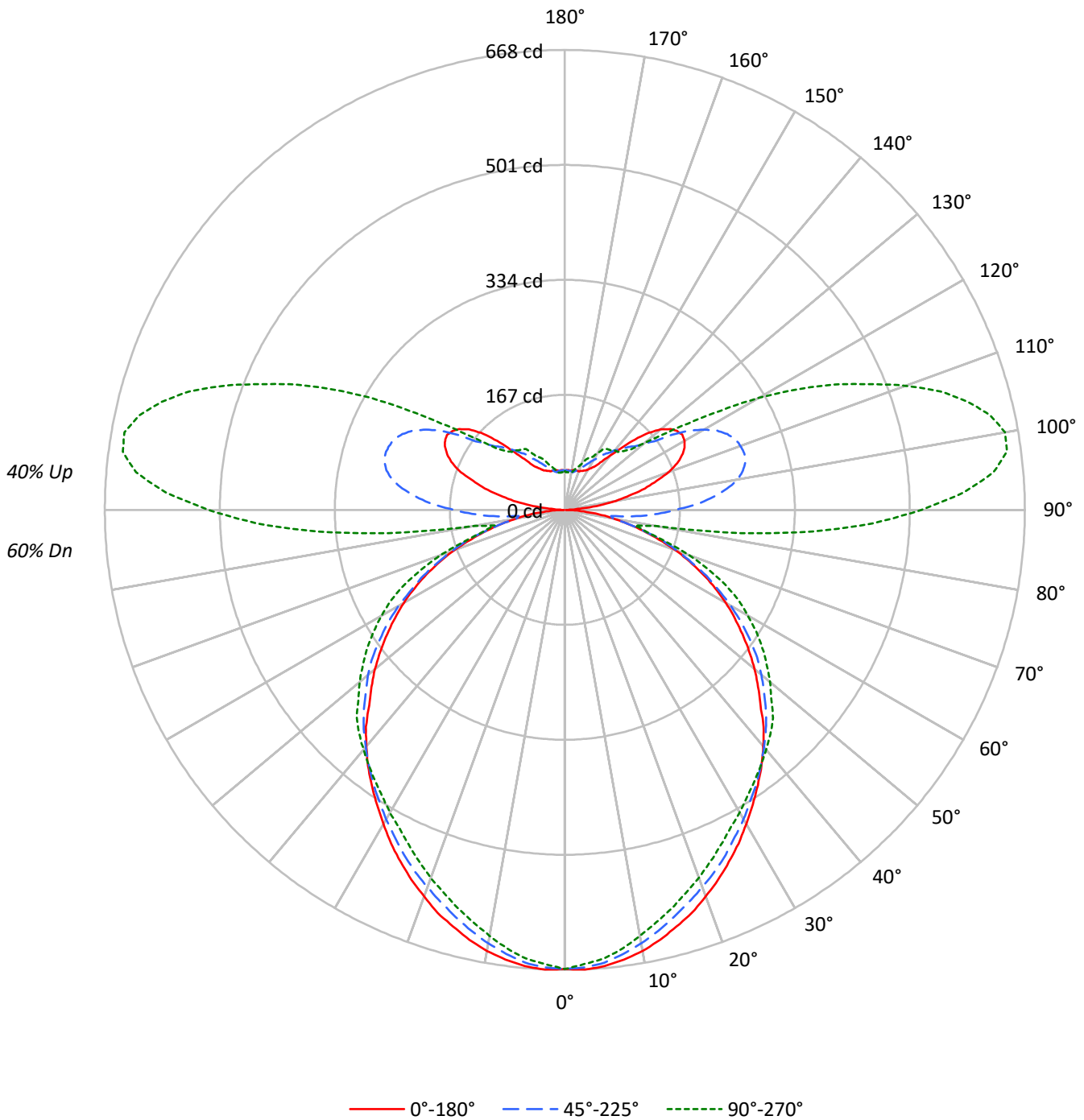
Lumens per Lamp: N/A  
Luminaire Lumens: 3240.1 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.32  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: General Diffuse

Input Watts (W): 27.7  
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	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°	2648	2648	2648
5°	2634	2549	2508
10°	2589	2419	2346
15°	2524	2287	2196
20°	2457	2169	2063
25°	2386	2061	1940
30°	2314	1955	1844
35°	2247	1862	1766
40°	2183	1773	1706
45°	2095	1685	1650
50°	2037	1590	1558
55°	1964	1476	1470
60°	1892	1337	1363
65°	1788	1179	1223
70°	1632	991	987
75°	1398	769	694
80°	1125	516	852
85°	661	897	2656



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.2	1.9
10°-20°	172.5	5.3
20°-30°	253.8	7.8
30°-40°	303.2	9.4
40°-50°	318.7	9.8
50°-60°	294.4	9.1
60°-70°	230.3	7.1
70°-80°	130.6	4.0
80°-90°	164.3	5.1
90°-100°	299.5	9.2
100°-110°	333.8	10.3
110°-120°	277.7	8.6
120°-130°	181.8	5.6
130°-140°	100.9	3.1
140°-150°	59.9	1.8
150°-160°	33.8	1.0
160°-170°	17.1	0.5
170°-180°	5.4	0.2
0°-30°	488.6	15.1
0°-40°	791.8	24.4
0°-60°	1405.0	43.4
0°-90°	1930.1	59.6
90°-120°	911.1	28.1
90°-150°	1253.7	38.7
90°-180°	1310.0	40.4
0°-180°	3240.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	665	660	660	656	654	63
15°	627	620	612	602	599	177
25°	564	559	553	542	537	260
35°	488	487	485	480	480	306
45°	402	403	413	423	427	312
55°	315	316	328	342	350	282
65°	222	220	227	251	257	219
75°	117	116	120	122	122	125
85°	27	35	104	270	362	32
90°	2	55	161	392	517	3
95°	26	92	217	484	625	33
105°	120	153	272	490	606	125
115°	188	188	260	366	431	184
125°	199	196	190	210	218	176
135°	145	133	128	116	120	112
145°	77	82	98	108	108	51
155°	63	63	72	80	84	29
165°	60	58	58	61	63	17
175°	58	58	56	56	55	6
180°	56	56	56	56	56	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	666.8	666.8	666.8	666.8	666.8
2.5°	668.4	663.6	665.2	663.6	660.4
5°	665.2	660.4	660.4	655.6	654.0
7.5°	658.8	652.4	650.7	644.3	642.7
10°	650.7	644.3	639.5	631.5	628.3
12.5°	639.5	633.1	626.6	618.6	613.8
15°	626.6	620.2	612.2	602.5	599.3
17.5°	613.8	605.8	597.7	588.1	583.3
20°	597.7	589.7	583.3	572.0	568.8
22.5°	581.7	575.2	568.8	555.9	552.7
25°	564.0	559.2	552.7	541.5	536.7
27.5°	546.3	541.5	535.1	525.4	520.6
30°	527.0	523.8	519.0	509.4	507.7
32.5°	507.7	506.1	501.3	494.9	493.3
35°	488.5	486.9	485.3	480.4	480.4
37.5°	469.2	467.6	467.6	466.0	467.6
40°	448.3	446.7	449.9	451.5	454.7
42.5°	427.4	427.4	432.2	438.7	441.9
45°	401.7	403.3	412.9	422.6	427.4
47.5°	380.8	382.4	392.1	403.3	406.5
50°	359.9	359.9	372.8	382.4	388.8
52.5°	337.4	339.0	351.9	363.1	369.6
55°	314.9	316.5	327.8	342.2	350.3
57.5°	292.4	292.4	303.7	319.8	329.4
60°	269.9	269.9	278.0	295.6	306.9
62.5°	245.8	245.8	250.7	274.8	284.4
65°	221.7	220.1	226.6	250.7	257.1
67.5°	196.0	194.4	199.2	223.3	225.0
70°	170.3	167.1	173.5	191.2	191.2
72.5°	143.0	141.4	149.4	155.9	152.6
75°	117.3	115.7	120.5	122.1	122.1
77.5°	93.2	93.2	93.2	96.4	104.4
80°	70.7	72.3	70.7	94.8	133.4
82.5°	49.8	49.8	67.5	186.4	258.7
85°	27.3	35.3	104.4	269.9	361.5
87.5°	11.2	40.2	135.0	335.8	448.3
90°	1.6	54.6	160.7	392.1	517.4
92.5°	9.6	75.5	192.8	446.7	580.1
95°	25.7	91.6	216.9	483.6	625.0
97.5°	51.4	109.3	237.8	509.4	647.5
100°	75.5	125.3	255.5	512.6	649.1
102.5°	96.4	139.8	265.1	506.1	633.1
105°	120.5	152.6	271.5	490.1	605.8
107.5°	139.8	163.9	273.2	464.4	572.0
110°	160.7	170.3	271.5	433.8	527.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.7	178.4	268.3	398.5	477.2
115°	188.0	188.0	260.3	366.3	430.6
117.5°	196.0	197.6	249.1	334.2	377.6
120°	200.8	202.5	233.0	297.3	324.6
122.5°	202.5	200.8	213.7	253.9	268.3
125°	199.2	196.0	189.6	210.5	218.5
127.5°	192.8	184.8	163.9	173.5	180.0
130°	181.6	168.7	147.8	143.0	151.0
132.5°	165.5	151.0	136.6	125.3	130.1
135°	144.6	133.4	128.5	115.7	120.5
137.5°	122.1	117.3	120.5	115.7	114.1
140°	102.8	104.4	112.5	112.5	112.5
142.5°	88.4	93.2	104.4	110.9	109.3
145°	77.1	81.9	98.0	107.7	107.7
147.5°	72.3	73.9	88.4	98.0	104.4
150°	67.5	69.1	83.6	91.6	94.8
152.5°	64.3	65.9	77.1	86.8	86.8
155°	62.7	62.7	72.3	80.3	83.6
157.5°	61.1	61.1	67.5	75.5	78.7
160°	59.5	59.5	64.3	72.3	70.7
162.5°	59.5	57.8	61.1	65.9	65.9
165°	59.5	57.8	57.8	61.1	62.7
167.5°	59.5	57.8	56.2	57.8	57.8
170°	57.8	57.8	56.2	56.2	54.6
172.5°	57.8	57.8	57.8	56.2	54.6
175°	57.8	57.8	56.2	56.2	54.6
177.5°	57.8	57.8	57.8	56.2	54.6
180°	56.2	56.2	56.2	56.2	56.2

(END OF REPORT)