

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: P534526

Luminaire Tested: **S921DIP-W230-XX4XX-UDD-W-SC**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534526  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35514)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S921DIP-W230-XX4XX-UDD-W-SC  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE CURVILINEAR HOUSING WITH SOLID UPLIGHT COVER  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

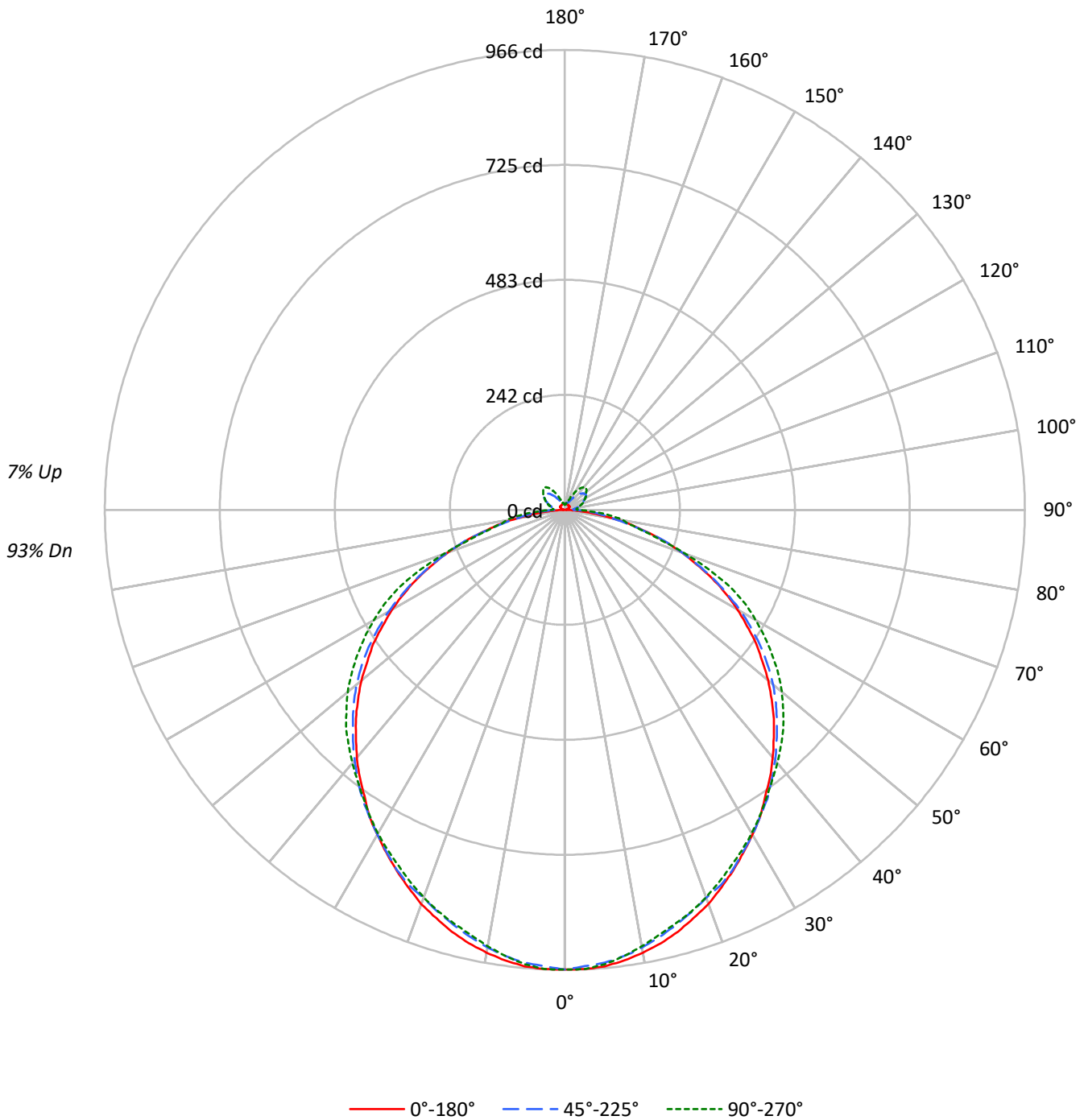
Lumens per Lamp: N/A  
Luminaire Lumens: 2928.2 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93	
1	107	102	98	94	104	99	95	92	94	91	88	89	86	84	84	82	80	84	82	80	78	
2	97	89	82	76	94	86	80	75	82	77	72	78	73	70	74	70	67	74	70	67	64	
3	89	78	70	63	85	76	68	62	72	66	60	68	63	58	65	60	57	65	60	57	54	
4	81	69	60	53	78	67	59	53	64	57	51	61	55	50	58	53	48	58	53	48	46	
5	74	61	52	46	72	60	52	45	57	50	44	54	48	43	52	46	42	52	46	42	40	
6	69	55	46	40	66	54	46	39	51	44	39	49	43	38	47	41	37	47	41	37	35	
7	64	50	41	35	61	49	41	35	47	39	34	45	38	33	43	37	33	43	37	33	31	
8	59	46	37	31	57	45	37	31	43	36	30	41	35	30	39	34	29	39	34	29	27	
9	55	42	34	28	53	41	33	28	39	32	27	38	31	27	36	31	26	36	31	26	24	
10	52	39	31	25	50	38	30	25	36	29	25	35	29	24	34	28	24	34	28	24	22	

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

	0°	45°	90°
0°	3835	3835	3835
5°	3812	3686	3673
10°	3758	3532	3475
15°	3696	3370	3296
20°	3623	3225	3141
25°	3537	3111	2984
30°	3459	2968	2850
35°	3374	2844	2714
40°	3308	2706	2605
45°	3237	2570	2506
50°	3154	2435	2384
55°	3063	2266	2232
60°	2934	2057	2054
65°	2757	1794	1820
70°	2497	1488	1391
75°	2100	1115	959
80°	1606	725	789
85°	802	492	553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.8	3.1
10°-20°	255.9	8.7
20°-30°	383.9	13.1
30°-40°	463.1	15.8
40°-50°	489.0	16.7
50°-60°	453.5	15.5
60°-70°	349.0	11.9
70°-80°	187.5	6.4
80°-90°	63.1	2.2
90°-100°	20.5	0.7
100°-110°	29.6	1.0
110°-120°	37.2	1.3
120°-130°	37.8	1.3
130°-140°	31.7	1.1
140°-150°	20.4	0.7
150°-160°	9.6	0.3
160°-170°	4.1	0.1
170°-180°	1.2	0.0
0°-30°	730.6	25.0
0°-40°	1193.8	40.8
0°-60°	2136.3	73.0
0°-90°	2736.0	93.4
90°-120°	87.4	3.0
90°-150°	177.3	6.1
90°-180°	192.0	6.6
0°-180°	2928.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	962	962	955	960	958	91
15°	917	916	902	901	899	259
25°	836	838	834	830	825	385
35°	734	743	741	740	738	460
45°	621	630	630	643	649	478
55°	491	497	503	523	532	437
65°	342	342	345	370	383	337
75°	176	175	175	169	169	189
85°	33	42	57	68	75	42
90°	2	12	20	26	27	2
95°	2	15	20	24	26	2
105°	6	29	32	33	33	6
115°	9	35	44	45	45	9
125°	12	27	54	56	56	11
135°	12	18	48	60	63	9
145°	12	15	32	50	54	8
155°	14	15	18	26	30	6
165°	14	14	15	15	15	4
175°	14	14	12	12	10	1
180°	12	12	12	12	12	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	965.5	965.5	965.5	965.5	965.5
2.5°	965.5	965.5	959.5	965.5	965.5
5°	962.5	962.5	954.9	959.5	958.0
7.5°	954.9	953.4	945.9	947.4	945.9
10°	944.4	944.4	933.9	933.9	930.8
12.5°	932.4	930.8	918.8	917.3	914.3
15°	917.3	915.8	902.2	900.7	899.2
17.5°	899.2	896.2	885.7	887.2	884.2
20°	881.1	878.1	867.6	870.6	866.1
22.5°	858.5	857.0	854.0	851.0	846.5
25°	836.0	837.5	834.4	829.9	825.4
27.5°	811.9	813.4	810.3	808.8	805.8
30°	787.8	790.8	787.8	787.8	784.7
32.5°	763.7	766.7	763.7	762.2	762.2
35°	733.5	742.6	741.1	739.6	738.1
37.5°	707.9	717.0	714.0	715.5	715.5
40°	679.3	688.3	686.8	692.9	694.4
42.5°	649.2	658.2	658.2	668.8	671.8
45°	620.6	629.6	629.6	643.2	649.2
47.5°	588.9	596.5	601.0	616.0	622.1
50°	557.3	563.3	570.9	587.4	595.0
52.5°	522.7	530.2	537.7	557.3	564.8
55°	491.0	497.1	503.1	522.7	531.7
57.5°	453.4	460.9	465.4	485.0	498.6
60°	418.7	423.2	427.8	448.9	462.4
62.5°	381.1	384.1	385.6	411.2	426.3
65°	341.9	341.9	344.9	370.5	382.6
67.5°	299.7	301.2	302.8	323.8	326.9
70°	260.6	257.6	260.6	272.6	269.6
72.5°	219.9	215.4	221.4	216.9	210.9
75°	176.2	174.7	174.7	168.7	168.7
77.5°	140.1	137.1	134.1	134.1	137.1
80°	100.9	102.4	99.4	113.0	123.5
82.5°	64.8	67.8	78.3	97.9	100.9
85°	33.1	42.2	57.2	67.8	75.3
87.5°	12.0	25.6	33.1	42.2	46.7
90°	1.5	12.0	19.6	25.6	27.1
92.5°	1.5	13.6	18.1	22.6	24.1
95°	1.5	15.1	19.6	24.1	25.6
97.5°	3.0	18.1	22.6	25.6	27.1
100°	3.0	21.1	25.6	27.1	28.6
102.5°	4.5	24.1	28.6	30.1	30.1
105°	6.0	28.6	31.6	33.1	33.1
107.5°	6.0	31.6	34.6	36.1	36.1
110°	7.5	34.6	37.7	39.2	39.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	9.0	36.1	40.7	42.2	42.2
115°	9.0	34.6	43.7	45.2	45.2
117.5°	10.5	34.6	46.7	46.7	46.7
120°	10.5	33.1	49.7	49.7	49.7
122.5°	12.0	30.1	51.2	52.7	52.7
125°	12.0	27.1	54.2	55.7	55.7
127.5°	12.0	25.6	54.2	57.2	57.2
130°	12.0	22.6	52.7	58.7	58.7
132.5°	12.0	19.6	51.2	61.8	61.8
135°	12.0	18.1	48.2	60.2	63.3
137.5°	12.0	16.6	45.2	60.2	63.3
140°	12.0	16.6	40.7	57.2	61.8
142.5°	12.0	16.6	36.1	54.2	58.7
145°	12.0	15.1	31.6	49.7	54.2
147.5°	12.0	15.1	27.1	43.7	48.2
150°	12.0	15.1	22.6	37.7	43.7
152.5°	12.0	15.1	19.6	31.6	37.7
155°	13.6	15.1	18.1	25.6	30.1
157.5°	13.6	15.1	16.6	21.1	22.6
160°	13.6	13.6	15.1	18.1	18.1
162.5°	13.6	13.6	15.1	15.1	15.1
165°	13.6	13.6	15.1	15.1	15.1
167.5°	13.6	13.6	15.1	15.1	13.6
170°	13.6	13.6	13.6	13.6	13.6
172.5°	13.6	13.6	13.6	13.6	12.0
175°	13.6	13.6	12.0	12.0	10.5
177.5°	13.6	13.6	13.6	12.0	10.5
180°	12.0	12.0	12.0	12.0	12.0

(END OF REPORT)