

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: P534529

Luminaire Tested: **S921DIP-W235-XX4XX-UDD-W-SC**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534529  
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-W235-XX4XX-UDD-W-SC  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE CURVILINEAR HOUSING WITH SOLID UPLIGHT COVER  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

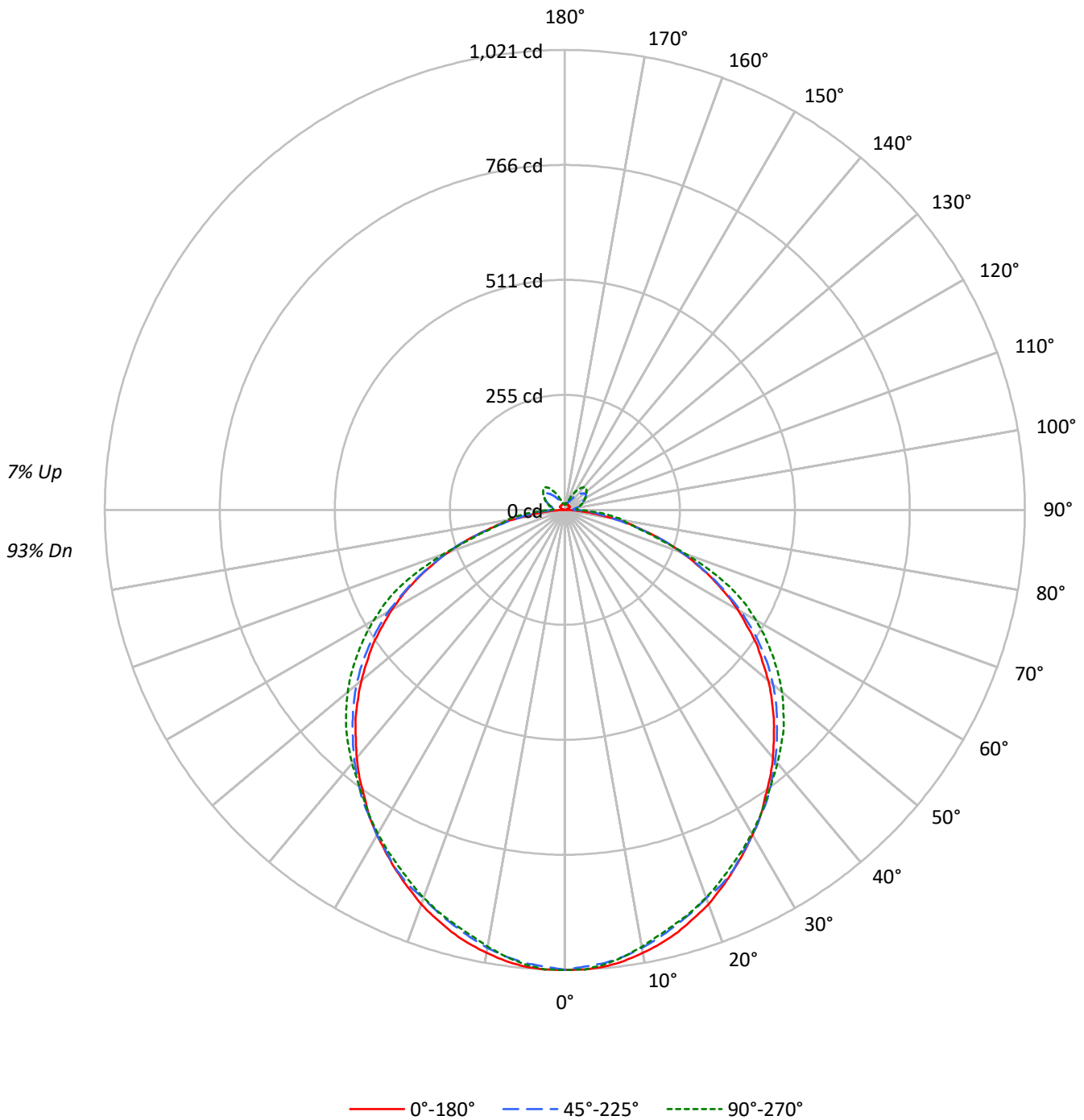
Lumens per Lamp: N/A  
Luminaire Lumens: 3097.1 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	4056	4056	4056
5°	4032	3899	3885
10°	3975	3736	3676
15°	3909	3565	3486
20°	3832	3411	3322
25°	3741	3291	3156
30°	3659	3139	3015
35°	3570	3008	2870
40°	3499	2863	2756
45°	3423	2718	2650
50°	3336	2576	2521
55°	3240	2397	2360
60°	3104	2176	2173
65°	2916	1897	1925
70°	2641	1574	1472
75°	2221	1180	1015
80°	1698	767	834
85°	848	520	586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.1	3.1
10°-20°	270.7	8.7
20°-30°	406.0	13.1
30°-40°	489.8	15.8
40°-50°	517.3	16.7
50°-60°	479.7	15.5
60°-70°	369.2	11.9
70°-80°	198.3	6.4
80°-90°	66.8	2.2
90°-100°	21.7	0.7
100°-110°	31.3	1.0
110°-120°	39.4	1.3
120°-130°	40.0	1.3
130°-140°	33.5	1.1
140°-150°	21.5	0.7
150°-160°	10.1	0.3
160°-170°	4.4	0.1
170°-180°	1.3	0.0
0°-30°	772.8	25.0
0°-40°	1262.6	40.8
0°-60°	2259.5	73.0
0°-90°	2893.8	93.4
90°-120°	92.4	3.0
90°-150°	187.5	6.1
90°-180°	203.0	6.6
0°-180°	3097.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	1018	1018	1010	1015	1013	97
15°	970	969	954	953	951	273
25°	884	886	883	878	873	408
35°	776	785	784	782	781	487
45°	656	666	666	680	687	506
55°	519	526	532	553	562	463
65°	362	362	365	392	405	357
75°	186	185	185	178	178	200
85°	35	45	60	72	80	44
90°	2	13	21	27	29	2
95°	2	16	21	26	27	2
105°	6	30	34	35	35	6
115°	10	37	46	48	48	10
125°	13	29	57	59	59	11
135°	13	19	51	64	67	10
145°	13	16	34	53	57	8
155°	14	16	19	27	32	6
165°	14	14	16	16	16	4
175°	14	14	13	13	11	1
180°	13	13	13	13	13	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1021.2	1021.2	1021.2	1021.2	1021.2
2.5°	1021.2	1021.2	1014.8	1021.2	1021.2
5°	1018.0	1018.0	1010.0	1014.8	1013.2
7.5°	1010.0	1008.5	1000.5	1002.1	1000.5
10°	998.9	998.9	987.7	987.7	984.6
12.5°	986.1	984.6	971.8	970.2	967.0
15°	970.2	968.6	954.3	952.7	951.1
17.5°	951.1	947.9	936.8	938.4	935.2
20°	932.0	928.8	917.6	920.8	916.1
22.5°	908.1	906.5	903.3	900.1	895.3
25°	884.2	885.8	882.6	877.8	873.0
27.5°	858.7	860.3	857.1	855.5	852.3
30°	833.2	836.4	833.2	833.2	830.0
32.5°	807.7	810.9	807.7	806.1	806.1
35°	775.9	785.4	783.8	782.2	780.6
37.5°	748.8	758.3	755.1	756.7	756.7
40°	718.5	728.1	726.5	732.8	734.4
42.5°	686.6	696.2	696.2	707.4	710.5
45°	656.4	665.9	665.9	680.3	686.6
47.5°	622.9	630.9	635.7	651.6	658.0
50°	589.5	595.8	603.8	621.3	629.3
52.5°	552.8	560.8	568.7	589.5	597.4
55°	519.4	525.7	532.1	552.8	562.4
57.5°	479.5	487.5	492.3	513.0	527.3
60°	442.9	447.7	452.4	474.8	489.1
62.5°	403.1	406.2	407.8	434.9	450.9
65°	361.6	361.6	364.8	391.9	404.7
67.5°	317.0	318.6	320.2	342.5	345.7
70°	275.6	272.4	275.6	288.4	285.2
72.5°	232.6	227.8	234.2	229.4	223.0
75°	186.4	184.8	184.8	178.4	178.4
77.5°	148.2	145.0	141.8	141.8	145.0
80°	106.7	108.3	105.1	119.5	130.6
82.5°	68.5	71.7	82.8	103.6	106.7
85°	35.0	44.6	60.5	71.7	79.7
87.5°	12.7	27.1	35.0	44.6	49.4
90°	1.6	12.7	20.7	27.1	28.7
92.5°	1.6	14.3	19.1	23.9	25.5
95°	1.6	15.9	20.7	25.5	27.1
97.5°	3.2	19.1	23.9	27.1	28.7
100°	3.2	22.3	27.1	28.7	30.3
102.5°	4.8	25.5	30.3	31.9	31.9
105°	6.4	30.3	33.5	35.0	35.0
107.5°	6.4	33.5	36.6	38.2	38.2
110°	8.0	36.6	39.8	41.4	41.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	9.6	38.2	43.0	44.6	44.6
115°	9.6	36.6	46.2	47.8	47.8
117.5°	11.2	36.6	49.4	49.4	49.4
120°	11.2	35.0	52.6	52.6	52.6
122.5°	12.7	31.9	54.2	55.8	55.8
125°	12.7	28.7	57.4	58.9	58.9
127.5°	12.7	27.1	57.4	60.5	60.5
130°	12.7	23.9	55.8	62.1	62.1
132.5°	12.7	20.7	54.2	65.3	65.3
135°	12.7	19.1	51.0	63.7	66.9
137.5°	12.7	17.5	47.8	63.7	66.9
140°	12.7	17.5	43.0	60.5	65.3
142.5°	12.7	17.5	38.2	57.4	62.1
145°	12.7	15.9	33.5	52.6	57.4
147.5°	12.7	15.9	28.7	46.2	51.0
150°	12.7	15.9	23.9	39.8	46.2
152.5°	12.7	15.9	20.7	33.5	39.8
155°	14.3	15.9	19.1	27.1	31.9
157.5°	14.3	15.9	17.5	22.3	23.9
160°	14.3	14.3	15.9	19.1	19.1
162.5°	14.3	14.3	15.9	15.9	15.9
165°	14.3	14.3	15.9	15.9	15.9
167.5°	14.3	14.3	15.9	15.9	14.3
170°	14.3	14.3	14.3	14.3	14.3
172.5°	14.3	14.3	14.3	14.3	12.7
175°	14.3	14.3	12.7	12.7	11.2
177.5°	14.3	14.3	14.3	12.7	11.2
180°	12.7	12.7	12.7	12.7	12.7

(END OF REPORT)