

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: P534522

Luminaire Tested: **S921DIP-W140-XX4XX-UDD-W-PC**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534522  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35513)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S921DIP-W140-XX4XX-UDD-W-PC  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE CURVILINEAR HOUSING WITH PERFORATED UPLIGHT COVER  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

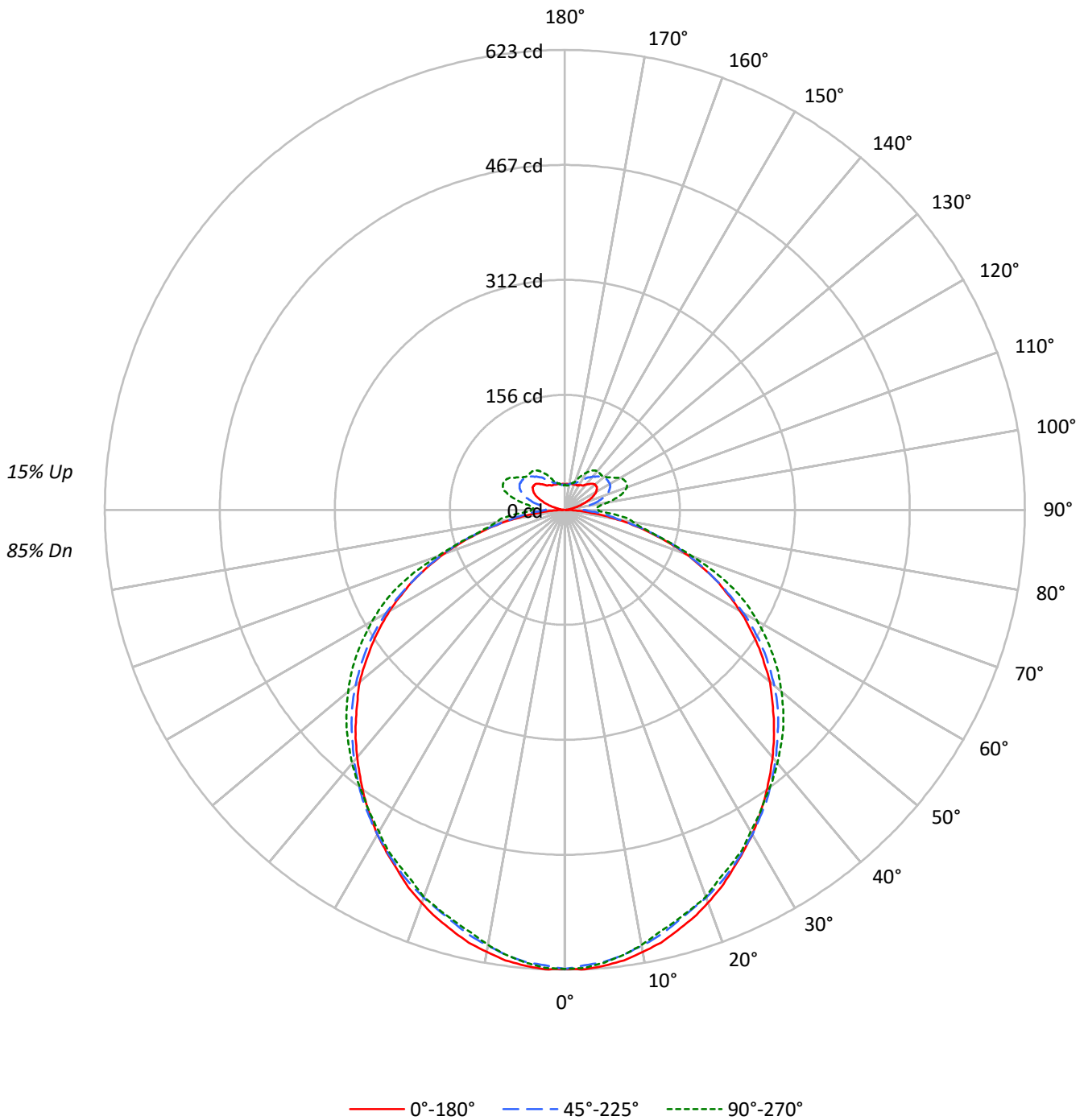
Lumens per Lamp: N/A  
Luminaire Lumens: 2114.5 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: Semi-Direct

Input Watts (W): 18.1  
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									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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	115	115	115	115	111	111	111	111	103	103	103	95	95	95	88	88	88	85																												
1	105	100	96	92	101	96	92	89	89	86	83	83	80	78	77	75	73	70																												
2	95	87	80	74	91	84	77	72	78	73	68	72	68	64	67	64	61	58																												
3	87	76	68	61	83	73	66	60	68	62	57	63	58	54	59	55	51	48																												
4	79	67	58	52	76	65	57	51	60	54	48	56	51	46	53	48	44	41																												
5	73	60	51	44	69	58	50	43	54	47	42	50	44	40	47	42	38	36																												
6	67	54	45	39	64	52	44	38	49	42	36	46	39	35	43	37	33	31																												
7	62	49	40	34	59	47	39	33	44	37	32	41	35	31	39	34	30	27																												
8	58	44	36	30	55	43	35	30	40	33	28	38	32	27	36	30	26	24																												
9	54	41	32	27	52	39	32	27	37	30	26	35	29	25	33	28	24	22																												
10	50	37	30	24	48	36	29	24	34	28	23	32	26	22	31	25	22	20																												

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

	0°	45°	90°
0°	2470	2470	2470
5°	2455	2372	2360
10°	2420	2267	2235
15°	2377	2164	2115
20°	2329	2078	2023
25°	2274	1997	1920
30°	2230	1913	1829
35°	2179	1834	1746
40°	2130	1749	1681
45°	2086	1668	1614
50°	2053	1579	1534
55°	1990	1475	1446
60°	1922	1344	1336
65°	1824	1176	1198
70°	1667	999	947
75°	1424	783	698
80°	1087	537	600
85°	569	403	478



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.4	2.8
10°-20°	164.5	7.8
20°-30°	247.0	11.7
30°-40°	298.6	14.1
40°-50°	316.4	15.0
50°-60°	295.0	14.0
60°-70°	230.4	10.9
70°-80°	130.2	6.2
80°-90°	51.8	2.4
90°-100°	30.4	1.4
100°-110°	52.0	2.5
110°-120°	66.2	3.1
120°-130°	60.1	2.8
130°-140°	46.7	2.2
140°-150°	33.1	1.6
150°-160°	19.9	0.9
160°-170°	10.5	0.5
170°-180°	3.3	0.2
0°-30°	470.0	22.2
0°-40°	768.5	36.3
0°-60°	1379.9	65.3
0°-90°	1792.3	84.8
90°-120°	148.7	7.0
90°-150°	288.5	13.6
90°-180°	322.0	15.2
0°-180°	2114.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	620	620	614	617	616	59
15°	590	589	579	579	577	166
25°	538	539	536	533	531	248
35°	474	479	478	477	475	296
45°	400	408	409	416	418	309
55°	319	324	328	338	345	285
65°	226	225	226	244	252	223
75°	120	117	123	122	123	127
85°	24	31	47	59	65	29
90°	1	13	26	38	45	2
95°	3	16	28	38	45	4
105°	19	33	48	68	79	21
115°	42	54	67	83	91	41
125°	53	60	70	74	77	47
135°	50	50	64	67	68	39
145°	40	43	53	62	65	26
155°	37	38	42	47	50	17
165°	36	36	37	37	37	10
175°	35	35	34	34	33	3
180°	34	34	34	34	34	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	621.9	621.9	621.9	621.9	621.9
2.5°	623.0	623.0	617.7	620.9	620.9
5°	619.8	619.8	614.5	616.6	615.5
7.5°	615.5	614.5	608.1	609.1	608.1
10°	608.1	607.0	599.5	600.6	598.5
12.5°	600.6	598.5	591.0	588.9	586.7
15°	589.9	588.9	579.3	579.3	577.1
17.5°	579.3	577.1	568.6	569.7	567.5
20°	566.5	565.4	559.0	560.1	557.9
22.5°	553.6	552.6	548.3	547.2	543.0
25°	537.6	538.7	535.5	533.4	531.2
27.5°	522.7	523.8	521.6	520.6	519.5
30°	507.8	509.9	507.8	505.6	503.5
32.5°	490.7	493.9	492.8	490.7	489.6
35°	473.6	479.0	477.9	476.8	474.7
37.5°	455.5	463.0	460.8	461.9	461.9
40°	437.4	444.8	443.8	447.0	448.0
42.5°	419.2	425.6	425.6	432.0	433.1
45°	400.0	407.5	408.6	416.0	418.2
47.5°	380.8	387.2	390.4	399.0	401.1
50°	362.7	367.0	370.2	379.8	383.0
52.5°	340.3	345.6	348.8	360.6	364.8
55°	319.0	324.3	327.5	338.2	344.6
57.5°	296.6	301.9	304.0	316.8	323.2
60°	274.2	277.4	279.5	292.3	300.8
62.5°	249.6	251.8	252.8	269.9	278.4
65°	226.2	225.1	226.2	244.3	251.8
67.5°	199.5	199.5	201.6	216.6	219.8
70°	173.9	172.8	174.9	184.5	183.5
72.5°	147.2	144.0	150.4	150.4	150.4
75°	119.5	117.3	122.7	121.6	122.7
77.5°	93.9	93.9	94.9	99.2	103.5
80°	68.3	71.5	73.6	86.4	93.9
82.5°	43.7	49.1	59.7	80.0	85.3
85°	23.5	30.9	46.9	58.7	65.1
87.5°	8.5	20.3	30.9	41.6	46.9
90°	1.1	12.8	25.6	38.4	44.8
92.5°	1.1	13.9	25.6	37.3	42.7
95°	3.2	16.0	27.7	38.4	44.8
97.5°	6.4	19.2	29.9	42.7	50.1
100°	9.6	23.5	34.1	51.2	60.8
102.5°	13.9	27.7	41.6	60.8	70.4
105°	19.2	33.1	48.0	68.3	78.9
107.5°	24.5	39.5	54.4	74.7	85.3
110°	30.9	44.8	59.7	78.9	89.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	36.3	50.1	64.0	81.1	90.7
115°	41.6	54.4	67.2	83.2	90.7
117.5°	45.9	57.6	69.3	83.2	89.6
120°	49.1	59.7	70.4	81.1	86.4
122.5°	51.2	59.7	70.4	77.9	81.1
125°	53.3	59.7	70.4	73.6	76.8
127.5°	53.3	58.7	69.3	70.4	72.5
130°	53.3	56.5	67.2	68.3	69.3
132.5°	52.3	53.3	66.1	67.2	68.3
135°	50.1	50.1	64.0	67.2	68.3
137.5°	46.9	48.0	60.8	68.3	68.3
140°	44.8	45.9	58.7	67.2	68.3
142.5°	41.6	44.8	55.5	65.1	67.2
145°	40.5	42.7	53.3	61.9	65.1
147.5°	39.5	41.6	49.1	58.7	61.9
150°	38.4	40.5	44.8	55.5	57.6
152.5°	37.3	39.5	42.7	52.3	54.4
155°	37.3	38.4	41.6	46.9	50.1
157.5°	37.3	38.4	39.5	42.7	44.8
160°	36.3	37.3	38.4	40.5	40.5
162.5°	36.3	36.3	38.4	38.4	38.4
165°	36.3	36.3	37.3	37.3	37.3
167.5°	36.3	36.3	36.3	36.3	36.3
170°	35.2	35.2	35.2	35.2	35.2
172.5°	35.2	35.2	34.1	34.1	33.1
175°	35.2	35.2	34.1	34.1	33.1
177.5°	35.2	35.2	34.1	34.1	33.1
180°	34.1	34.1	34.1	34.1	34.1

(END OF REPORT)