

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: P534550

Luminaire Tested: **S921DIP-W440-XX4XX-UDD-W-SC**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534550  
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-W440-XX4XX-UDD-W-SC  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE CURVILINEAR HOUSING WITH SOLID UPLIGHT COVER  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

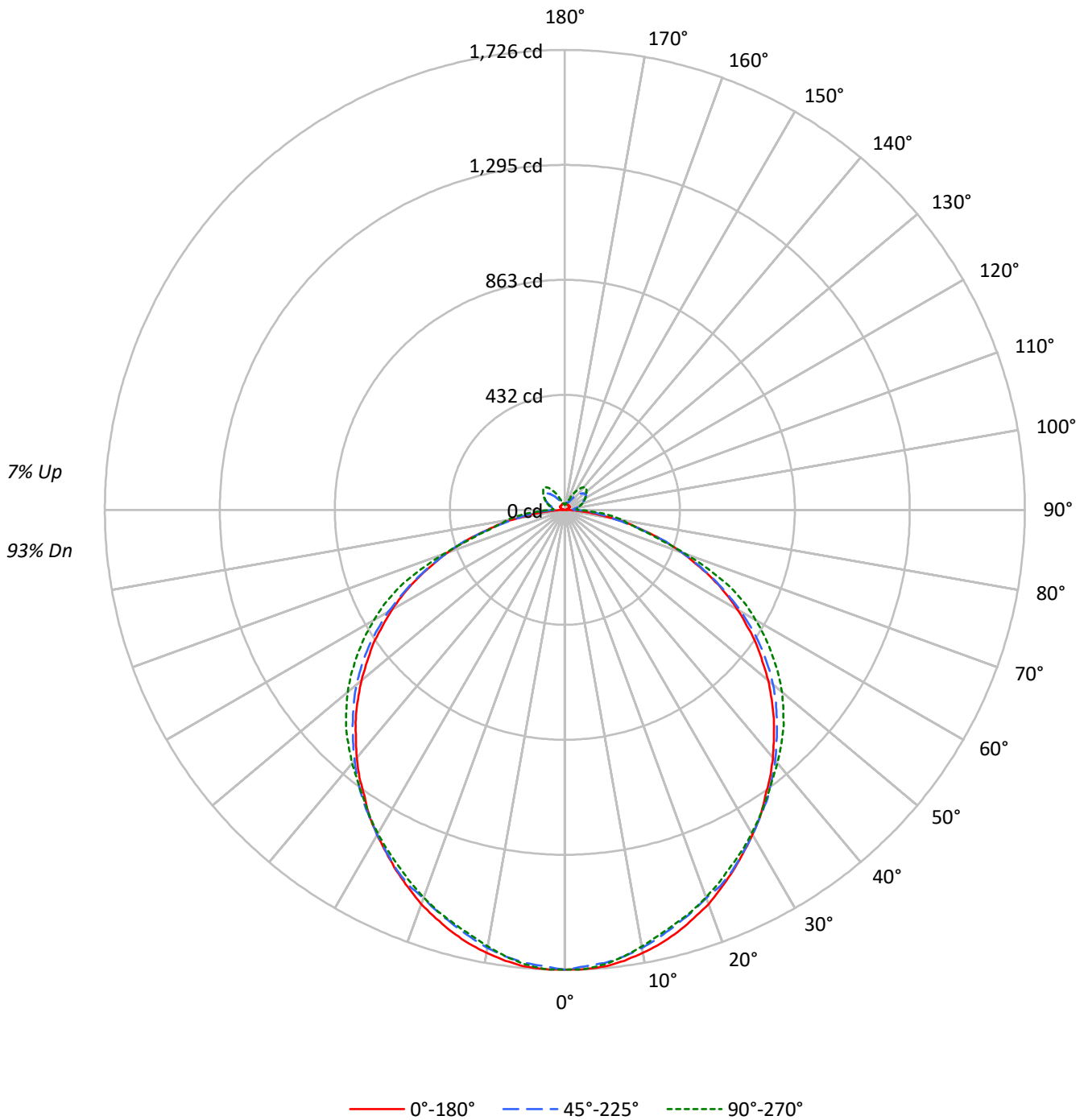
Lumens per Lamp: N/A  
Luminaire Lumens: 5233.9 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: Direct

Input Watts (W): 50.7  
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																		
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	0																			
RCR																																														
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	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	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	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	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	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	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	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	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	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	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	34	28	24	34	28	24	22																			

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

	0°	45°	90°
0°	6855	6855	6855
5°	6813	6589	6566
10°	6717	6313	6212
15°	6606	6024	5891
20°	6476	5765	5614
25°	6321	5561	5334
30°	6183	5305	5095
35°	6032	5083	4851
40°	5913	4838	4657
45°	5785	4593	4480
50°	5637	4353	4261
55°	5475	4050	3989
60°	5246	3677	3672
65°	4929	3206	3252
70°	4464	2660	2487
75°	3754	1993	1715
80°	2871	1297	1410
85°	1434	879	989



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.4	3.1
10°-20°	457.4	8.7
20°-30°	686.2	13.1
30°-40°	827.8	15.8
40°-50°	874.1	16.7
50°-60°	810.6	15.5
60°-70°	623.9	11.9
70°-80°	335.1	6.4
80°-90°	112.9	2.2
90°-100°	36.7	0.7
100°-110°	53.0	1.0
110°-120°	66.5	1.3
120°-130°	67.6	1.3
130°-140°	56.6	1.1
140°-150°	36.4	0.7
150°-160°	17.1	0.3
160°-170°	7.4	0.1
170°-180°	2.2	0.0
0°-30°	1306.0	25.0
0°-40°	2133.7	40.8
0°-60°	3818.5	73.0
0°-90°	4890.4	93.4
90°-120°	156.2	3.0
90°-150°	316.9	6.1
90°-180°	344.0	6.6
0°-180°	5233.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1720	1720	1707	1715	1712	163
15°	1640	1637	1613	1610	1607	462
25°	1494	1497	1492	1484	1475	689
35°	1311	1327	1325	1322	1319	823
45°	1109	1125	1125	1150	1160	855
55°	878	888	899	934	950	782
65°	611	611	616	662	684	603
75°	315	312	312	302	302	338
85°	59	75	102	121	135	75
90°	3	22	35	46	48	4
95°	3	27	35	43	46	3
105°	11	51	56	59	59	10
115°	16	62	78	81	81	17
125°	22	48	97	100	100	19
135°	22	32	86	108	113	17
145°	22	27	56	89	97	14
155°	24	27	32	46	54	11
165°	24	24	27	27	27	7
175°	24	24	22	22	19	2
180°	22	22	22	22	22	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1725.8	1725.8	1725.8	1725.8	1725.8
2.5°	1725.8	1725.8	1715.0	1725.8	1725.8
5°	1720.4	1720.4	1706.9	1715.0	1712.3
7.5°	1706.9	1704.2	1690.8	1693.5	1690.8
10°	1688.1	1688.1	1669.2	1669.2	1663.8
12.5°	1666.5	1663.8	1642.3	1639.6	1634.2
15°	1639.6	1636.9	1612.7	1610.0	1607.3
17.5°	1607.3	1601.9	1583.1	1585.8	1580.4
20°	1575.0	1569.6	1550.8	1556.1	1548.1
22.5°	1534.6	1531.9	1526.5	1521.1	1513.1
25°	1494.2	1496.9	1491.5	1483.5	1475.4
27.5°	1451.1	1453.8	1448.5	1445.8	1440.4
30°	1408.1	1413.5	1408.1	1408.1	1402.7
32.5°	1365.0	1370.4	1365.0	1362.3	1362.3
35°	1311.1	1327.3	1324.6	1321.9	1319.2
37.5°	1265.4	1281.5	1276.1	1278.8	1278.8
40°	1214.2	1230.4	1227.7	1238.5	1241.1
42.5°	1160.4	1176.5	1176.5	1195.4	1200.8
45°	1109.2	1125.4	1125.4	1149.6	1160.4
47.5°	1052.7	1066.1	1074.2	1101.1	1111.9
50°	996.1	1006.9	1020.4	1050.0	1063.5
52.5°	934.2	947.7	961.1	996.1	1009.6
55°	877.7	888.5	899.2	934.2	950.4
57.5°	810.4	823.8	831.9	866.9	891.1
60°	748.5	756.5	764.6	802.3	826.5
62.5°	681.1	686.5	689.2	735.0	761.9
65°	611.2	611.2	616.5	662.3	683.8
67.5°	535.8	538.5	541.2	578.8	584.2
70°	465.8	460.4	465.8	487.3	481.9
72.5°	393.1	385.0	395.8	387.7	376.9
75°	315.0	312.3	312.3	301.5	301.5
77.5°	250.4	245.0	239.6	239.6	245.0
80°	180.4	183.1	177.7	201.9	220.8
82.5°	115.8	121.2	140.0	175.0	180.4
85°	59.2	75.4	102.3	121.2	134.6
87.5°	21.5	45.8	59.2	75.4	83.5
90°	2.7	21.5	35.0	45.8	48.5
92.5°	2.7	24.2	32.3	40.4	43.1
95°	2.7	26.9	35.0	43.1	45.8
97.5°	5.4	32.3	40.4	45.8	48.5
100°	5.4	37.7	45.8	48.5	51.2
102.5°	8.1	43.1	51.2	53.8	53.8
105°	10.8	51.2	56.5	59.2	59.2
107.5°	10.8	56.5	61.9	64.6	64.6
110°	13.5	61.9	67.3	70.0	70.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	16.2	64.6	72.7	75.4	75.4
115°	16.2	61.9	78.1	80.8	80.8
117.5°	18.8	61.9	83.5	83.5	83.5
120°	18.8	59.2	88.8	88.8	88.8
122.5°	21.5	53.8	91.5	94.2	94.2
125°	21.5	48.5	96.9	99.6	99.6
127.5°	21.5	45.8	96.9	102.3	102.3
130°	21.5	40.4	94.2	105.0	105.0
132.5°	21.5	35.0	91.5	110.4	110.4
135°	21.5	32.3	86.2	107.7	113.1
137.5°	21.5	29.6	80.8	107.7	113.1
140°	21.5	29.6	72.7	102.3	110.4
142.5°	21.5	29.6	64.6	96.9	105.0
145°	21.5	26.9	56.5	88.8	96.9
147.5°	21.5	26.9	48.5	78.1	86.2
150°	21.5	26.9	40.4	67.3	78.1
152.5°	21.5	26.9	35.0	56.5	67.3
155°	24.2	26.9	32.3	45.8	53.8
157.5°	24.2	26.9	29.6	37.7	40.4
160°	24.2	24.2	26.9	32.3	32.3
162.5°	24.2	24.2	26.9	26.9	26.9
165°	24.2	24.2	26.9	26.9	26.9
167.5°	24.2	24.2	26.9	26.9	24.2
170°	24.2	24.2	24.2	24.2	24.2
172.5°	24.2	24.2	24.2	24.2	21.5
175°	24.2	24.2	21.5	21.5	18.8
177.5°	24.2	24.2	24.2	21.5	18.8
180°	21.5	21.5	21.5	21.5	21.5

(END OF REPORT)