

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: P534480

Luminaire Tested: **S920DIP-W230-XX4XX-UDD-W-PC**

Issue Date: 6/9/2021

Test Information

Test Method: LM-79-08
Report Number: P534480
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29792)
Test Lab: INNOVATION CENTER
Issue Date: 6/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S920DIP-W230-XX4XX-UDD-W-PC
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE
WHITE RECTANCULAR HOUSING WITH PERFORATED UPLIGHT COVER
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

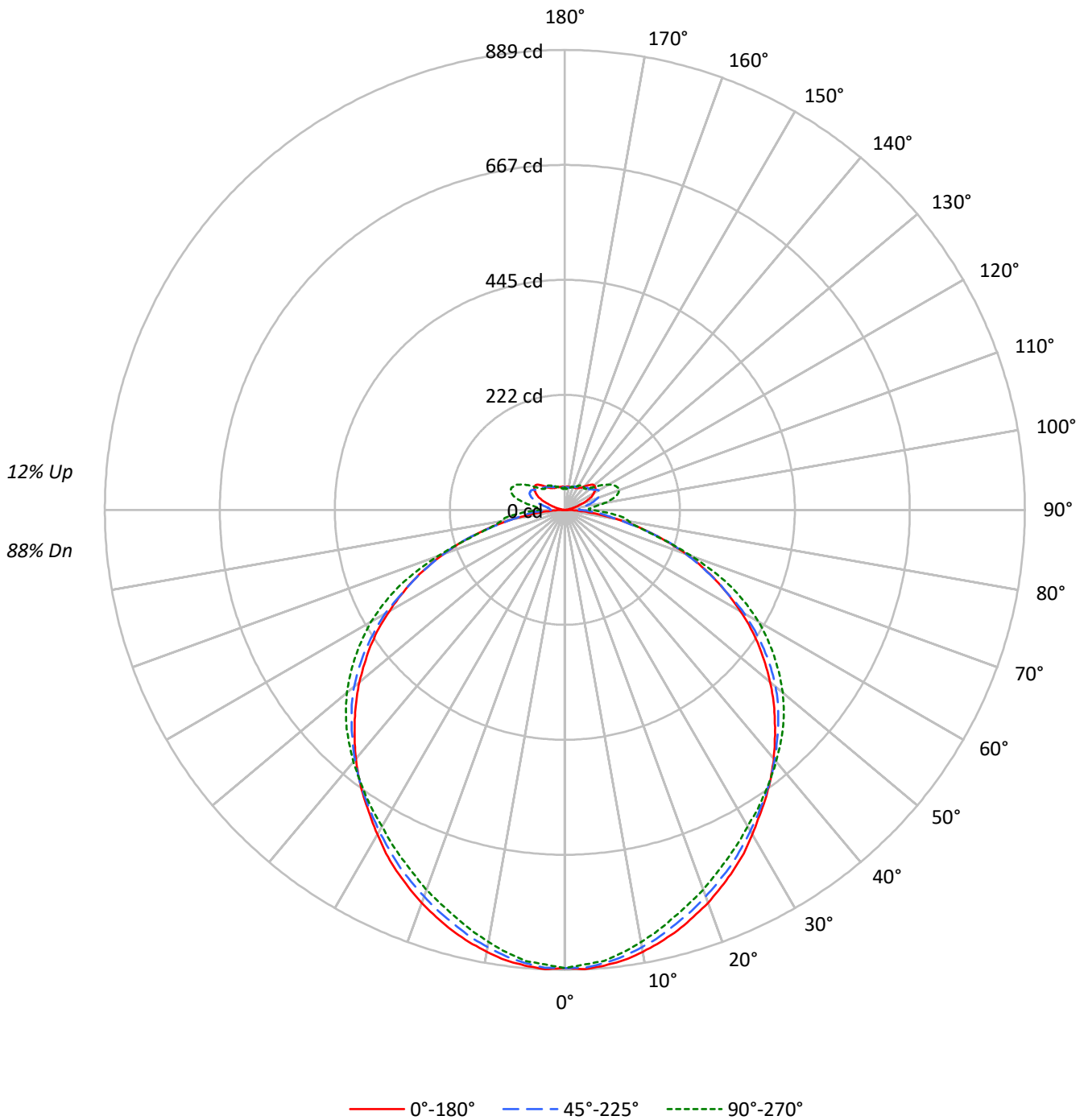
Lumens per Lamp: N/A
Luminaire Lumens: 2896.5 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')
CIE Type: Semi-Direct

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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	88				
1	106	101	96	92	102	97	93	90	91	88	85	85	82	80	79	77	75	73				
2	96	87	81	75	92	85	78	73	79	74	69	74	70	66	69	66	63	60				
3	87	77	68	62	84	74	67	61	69	63	58	65	60	55	61	57	53	50				
4	80	68	59	52	76	66	57	51	61	55	49	58	52	47	54	49	45	43				
5	73	60	51	45	70	58	50	44	55	48	42	52	46	41	49	43	39	37				
6	67	54	45	39	65	53	44	38	50	42	37	47	40	36	44	39	34	32				
7	62	49	40	34	60	48	39	34	45	38	33	42	36	31	40	35	30	28				
8	58	45	36	30	56	43	35	30	41	34	29	39	33	28	37	31	27	25				
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	29	25	23				
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3518	3518	3518
5°	3502	3395	3356
10°	3452	3247	3166
15°	3392	3094	2987
20°	3325	2957	2835
25°	3256	2830	2690
30°	3181	2702	2566
35°	3118	2590	2470
40°	3059	2487	2385
45°	2993	2379	2303
50°	2932	2268	2203
55°	2856	2117	2073
60°	2744	1927	1920
65°	2599	1676	1698
70°	2382	1419	1337
75°	2064	1096	951
80°	1582	725	798
85°	875	570	675



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	2.9
10°-20°	233.5	8.1
20°-30°	348.8	12.0
30°-40°	422.3	14.6
40°-50°	450.1	15.5
50°-60°	421.3	14.5
60°-70°	328.0	11.3
70°-80°	182.6	6.3
80°-90°	70.5	2.4
90°-100°	34.2	1.2
100°-110°	61.1	2.1
110°-120°	75.1	2.6
120°-130°	64.8	2.2
130°-140°	47.1	1.6
140°-150°	34.3	1.2
150°-160°	22.8	0.8
160°-170°	12.9	0.4
170°-180°	4.2	0.1
0°-30°	665.4	23.0
0°-40°	1087.7	37.6
0°-60°	1959.2	67.6
0°-90°	2540.3	87.7
90°-120°	170.3	5.9
90°-150°	316.4	10.9
90°-180°	356.0	12.3
0°-180°	2896.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	886	886	886	886	886	
5°	884	878	880	877	875	84
15°	842	833	828	819	815	237
25°	770	764	759	747	744	355
35°	678	676	675	672	672	424
45°	574	574	583	592	596	443
55°	458	458	470	484	494	409
65°	322	321	322	348	357	318
75°	173	169	172	169	167	182
85°	36	42	66	84	92	43
90°	0	14	27	39	47	2
95°	3	17	30	44	54	3
105°	21	33	54	86	102	23
115°	54	54	75	96	108	52
125°	72	68	68	77	81	64
135°	68	62	60	57	57	52
145°	53	53	54	57	57	33
155°	47	47	50	51	50	22
165°	45	45	45	45	45	13
175°	45	44	44	44	41	4
180°	44	44	44	44	44	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	885.7	885.7	885.7	885.7	885.7
2.5°	888.7	882.6	885.7	884.2	879.6
5°	884.2	878.1	879.6	876.6	875.1
7.5°	878.1	870.6	870.6	866.1	863.1
10°	867.6	860.1	858.5	851.0	848.0
12.5°	855.5	848.0	845.0	836.0	832.9
15°	842.0	832.9	828.4	819.4	814.9
17.5°	825.4	817.9	813.4	802.8	798.3
20°	808.8	801.3	795.3	784.7	781.7
22.5°	789.3	781.7	777.2	765.2	762.2
25°	769.7	763.7	759.1	747.1	744.1
27.5°	748.6	742.6	738.1	729.0	726.0
30°	724.5	721.5	717.0	707.9	706.4
32.5°	700.4	698.9	695.9	689.9	689.9
35°	677.8	676.3	674.8	671.8	671.8
37.5°	653.7	652.2	653.7	652.2	653.7
40°	628.1	626.6	631.1	632.6	635.6
42.5°	601.0	601.0	607.0	613.0	616.0
45°	573.9	573.9	582.9	591.9	596.5
47.5°	546.8	546.8	558.8	567.8	573.9
50°	518.1	518.1	531.7	542.2	549.8
52.5°	488.0	488.0	501.6	515.1	522.7
55°	457.9	457.9	469.9	483.5	494.0
57.5°	426.3	426.3	435.3	453.4	463.9
60°	391.6	393.1	400.7	420.2	432.3
62.5°	357.0	357.0	358.5	385.6	396.1
65°	322.3	320.8	322.3	347.9	357.0
67.5°	286.2	283.2	284.7	310.3	310.3
70°	248.5	244.0	248.5	262.1	259.1
72.5°	209.4	204.8	213.9	212.4	209.4
75°	173.2	168.7	171.7	168.7	167.2
77.5°	135.6	132.5	131.0	132.5	137.1
80°	99.4	100.9	99.4	116.0	125.0
82.5°	64.8	67.8	79.8	105.4	116.0
85°	36.1	42.2	66.3	84.3	91.9
87.5°	13.6	27.1	43.7	58.7	66.3
90°	0.0	13.6	27.1	39.2	46.7
92.5°	1.5	13.6	28.6	39.2	46.7
95°	3.0	16.6	30.1	43.7	54.2
97.5°	4.5	19.6	33.1	52.7	64.8
100°	9.0	22.6	39.2	64.8	79.8
102.5°	15.1	27.1	46.7	76.8	91.9
105°	21.1	33.1	54.2	85.9	102.4
107.5°	28.6	37.7	61.8	91.9	108.4
110°	37.7	43.7	67.8	94.9	111.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	45.2	48.2	72.3	96.4	111.5
115°	54.2	54.2	75.3	96.4	108.4
117.5°	60.2	58.7	75.3	94.9	105.4
120°	64.8	63.3	75.3	91.9	97.9
122.5°	69.3	66.3	72.3	84.3	90.4
125°	72.3	67.8	67.8	76.8	81.3
127.5°	73.8	67.8	64.8	69.3	72.3
130°	73.8	67.8	61.8	61.8	66.3
132.5°	72.3	64.8	61.8	57.2	60.2
135°	67.8	61.8	60.2	57.2	57.2
137.5°	63.3	58.7	58.7	57.2	55.7
140°	58.7	57.2	57.2	57.2	57.2
142.5°	54.2	54.2	55.7	57.2	57.2
145°	52.7	52.7	54.2	57.2	57.2
147.5°	49.7	49.7	52.7	55.7	55.7
150°	48.2	49.7	51.2	54.2	54.2
152.5°	48.2	48.2	49.7	52.7	51.2
155°	46.7	46.7	49.7	51.2	49.7
157.5°	46.7	46.7	48.2	49.7	49.7
160°	46.7	45.2	46.7	48.2	46.7
162.5°	46.7	45.2	46.7	46.7	46.7
165°	45.2	45.2	45.2	45.2	45.2
167.5°	45.2	45.2	43.7	45.2	43.7
170°	45.2	43.7	43.7	43.7	42.2
172.5°	45.2	43.7	43.7	43.7	42.2
175°	45.2	43.7	43.7	43.7	40.7
177.5°	43.7	43.7	43.7	43.7	40.7
180°	43.7	43.7	43.7	43.7	43.7

(END OF REPORT)