

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: P534485

Luminaire Tested: **S920DIP-W235-XX4XX-UDD-W**

Issue Date: 6/9/2021

Test Information

Test Method: LM-79-08
Report Number: P534485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29790)
Test Lab: INNOVATION CENTER
Issue Date: 6/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S920DIP-W235-XX4XX-UDD-W
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE
WHITE RECTANCULAR HOUSING
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

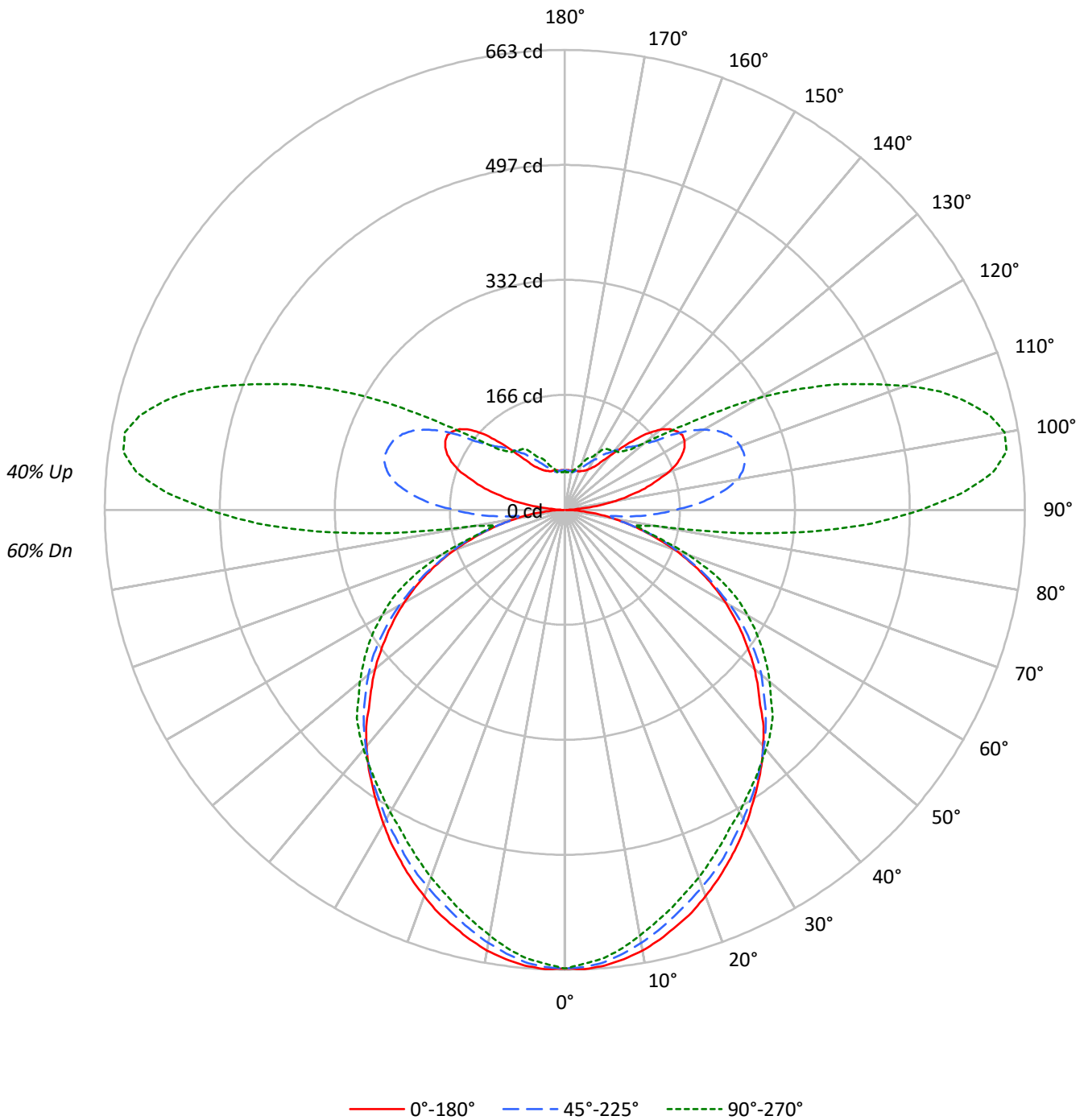
Lumens per Lamp: N/A
Luminaire Lumens: 3212.6 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	98	93	89	85	91	87	83	79	75	72	70	65	62	60	55	53	52	47
2	89	81	74	68	83	76	70	64	66	61	57	56	53	50	48	45	43	39
3	81	71	63	57	75	66	59	54	58	52	48	50	45	42	42	39	36	32
4	74	63	54	48	69	59	51	45	51	45	40	44	39	36	38	34	31	28
5	68	56	47	41	63	52	45	39	46	39	35	40	35	31	34	30	27	24
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24	21
7	58	45	37	31	54	42	35	29	37	31	27	32	27	24	28	24	21	18
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19	16
9	50	37	30	24	47	35	28	23	31	25	21	27	22	19	24	20	17	15
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2626	2626	2626
5°	2612	2528	2486
10°	2567	2398	2326
15°	2503	2267	2178
20°	2436	2150	2045
25°	2366	2043	1924
30°	2294	1939	1828
35°	2228	1846	1751
40°	2165	1758	1692
45°	2077	1671	1636
50°	2020	1577	1544
55°	1948	1464	1458
60°	1875	1325	1352
65°	1774	1168	1212
70°	1619	983	978
75°	1386	763	689
80°	1116	512	844
85°	657	891	2634



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	1.9
10°-20°	171.1	5.3
20°-30°	251.7	7.8
30°-40°	300.6	9.4
40°-50°	316.0	9.8
50°-60°	291.9	9.1
60°-70°	228.3	7.1
70°-80°	129.5	4.0
80°-90°	162.9	5.1
90°-100°	297.0	9.2
100°-110°	331.0	10.3
110°-120°	275.4	8.6
120°-130°	180.3	5.6
130°-140°	100.0	3.1
140°-150°	59.4	1.8
150°-160°	33.5	1.0
160°-170°	17.0	0.5
170°-180°	5.4	0.2
0°-30°	484.4	15.1
0°-40°	785.1	24.4
0°-60°	1393.0	43.4
0°-90°	1913.7	59.6
90°-120°	903.4	28.1
90°-150°	1243.0	38.7
90°-180°	1299.0	40.4
0°-180°	3212.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	660	655	655	650	648	62
15°	621	615	607	597	594	175
25°	559	554	548	537	532	258
35°	484	483	481	476	476	303
45°	398	400	409	419	424	309
55°	312	314	325	339	347	279
65°	220	218	225	248	255	217
75°	116	115	120	121	121	124
85°	27	35	104	268	358	32
90°	2	54	159	389	513	3
95°	26	91	215	480	620	32
105°	120	151	269	486	601	124
115°	186	186	258	363	427	182
125°	198	194	188	209	217	175
135°	143	132	128	115	120	111
145°	76	81	97	107	107	51
155°	62	62	72	80	83	29
165°	59	57	57	60	62	17
175°	57	57	56	56	54	5
180°	56	56	56	56	56	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	661.2	661.2	661.2	661.2	661.2
2.5°	662.7	658.0	659.6	658.0	654.8
5°	659.6	654.8	654.8	650.0	648.4
7.5°	653.2	646.8	645.2	638.8	637.3
10°	645.2	638.8	634.1	626.1	622.9
12.5°	634.1	627.7	621.3	613.4	608.6
15°	621.3	614.9	607.0	597.4	594.2
17.5°	608.6	600.6	592.6	583.1	578.3
20°	592.6	584.7	578.3	567.2	564.0
22.5°	576.7	570.3	564.0	551.2	548.0
25°	559.2	554.4	548.0	536.9	532.1
27.5°	541.7	536.9	530.5	521.0	516.2
30°	522.5	519.4	514.6	505.0	503.4
32.5°	503.4	501.8	497.1	490.7	489.1
35°	484.3	482.7	481.1	476.3	476.3
37.5°	465.2	463.6	463.6	462.0	463.6
40°	444.5	442.9	446.1	447.7	450.9
42.5°	423.8	423.8	428.6	434.9	438.1
45°	398.3	399.9	409.4	419.0	423.8
47.5°	377.6	379.2	388.7	399.9	403.1
50°	356.9	356.9	369.6	379.2	385.5
52.5°	334.6	336.2	348.9	360.0	366.4
55°	312.3	313.8	325.0	339.3	347.3
57.5°	290.0	290.0	301.1	317.0	326.6
60°	267.6	267.6	275.6	293.1	304.3
62.5°	243.7	243.7	248.5	272.4	282.0
65°	219.9	218.3	224.6	248.5	254.9
67.5°	194.4	192.8	197.5	221.4	223.0
70°	168.9	165.7	172.1	189.6	189.6
72.5°	141.8	140.2	148.2	154.5	151.3
75°	116.3	114.7	119.5	121.1	121.1
77.5°	92.4	92.4	92.4	95.6	103.6
80°	70.1	71.7	70.1	94.0	132.2
82.5°	49.4	49.4	66.9	184.8	256.5
85°	27.1	35.0	103.6	267.6	358.5
87.5°	11.2	39.8	133.8	333.0	444.5
90°	1.6	54.2	159.3	388.7	513.0
92.5°	9.6	74.9	191.2	442.9	575.1
95°	25.5	90.8	215.1	479.5	619.7
97.5°	51.0	108.3	235.8	505.0	642.0
100°	74.9	124.3	253.3	508.2	643.6
102.5°	95.6	138.6	262.9	501.8	627.7
105°	119.5	151.3	269.2	485.9	600.6
107.5°	138.6	162.5	270.8	460.4	567.2
110°	159.3	168.9	269.2	430.1	522.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.2	176.8	266.1	395.1	473.2
115°	186.4	186.4	258.1	363.2	427.0
117.5°	194.4	196.0	246.9	331.4	374.4
120°	199.1	200.7	231.0	294.7	321.8
122.5°	200.7	199.1	211.9	251.7	266.1
125°	197.5	194.4	188.0	208.7	216.7
127.5°	191.2	183.2	162.5	172.1	178.4
130°	180.0	167.3	146.6	141.8	149.8
132.5°	164.1	149.8	135.4	124.3	129.0
135°	143.4	132.2	127.5	114.7	119.5
137.5°	121.1	116.3	119.5	114.7	113.1
140°	102.0	103.6	111.5	111.5	111.5
142.5°	87.6	92.4	103.6	109.9	108.3
145°	76.5	81.2	97.2	106.7	106.7
147.5°	71.7	73.3	87.6	97.2	103.6
150°	66.9	68.5	82.8	90.8	94.0
152.5°	63.7	65.3	76.5	86.0	86.0
155°	62.1	62.1	71.7	79.7	82.8
157.5°	60.5	60.5	66.9	74.9	78.1
160°	58.9	58.9	63.7	71.7	70.1
162.5°	58.9	57.4	60.5	65.3	65.3
165°	58.9	57.4	57.4	60.5	62.1
167.5°	58.9	57.4	55.8	57.4	57.4
170°	57.4	57.4	55.8	55.8	54.2
172.5°	57.4	57.4	57.4	55.8	54.2
175°	57.4	57.4	55.8	55.8	54.2
177.5°	57.4	57.4	57.4	55.8	54.2
180°	55.8	55.8	55.8	55.8	55.8

(END OF REPORT)