

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: P534482

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

Issue Date: 6/9/2021

Test Information

Test Method: LM-79-08
Report Number: P534482
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-W230-XX4XX-UDD-W
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE
WHITE RECTANCULAR HOUSING
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

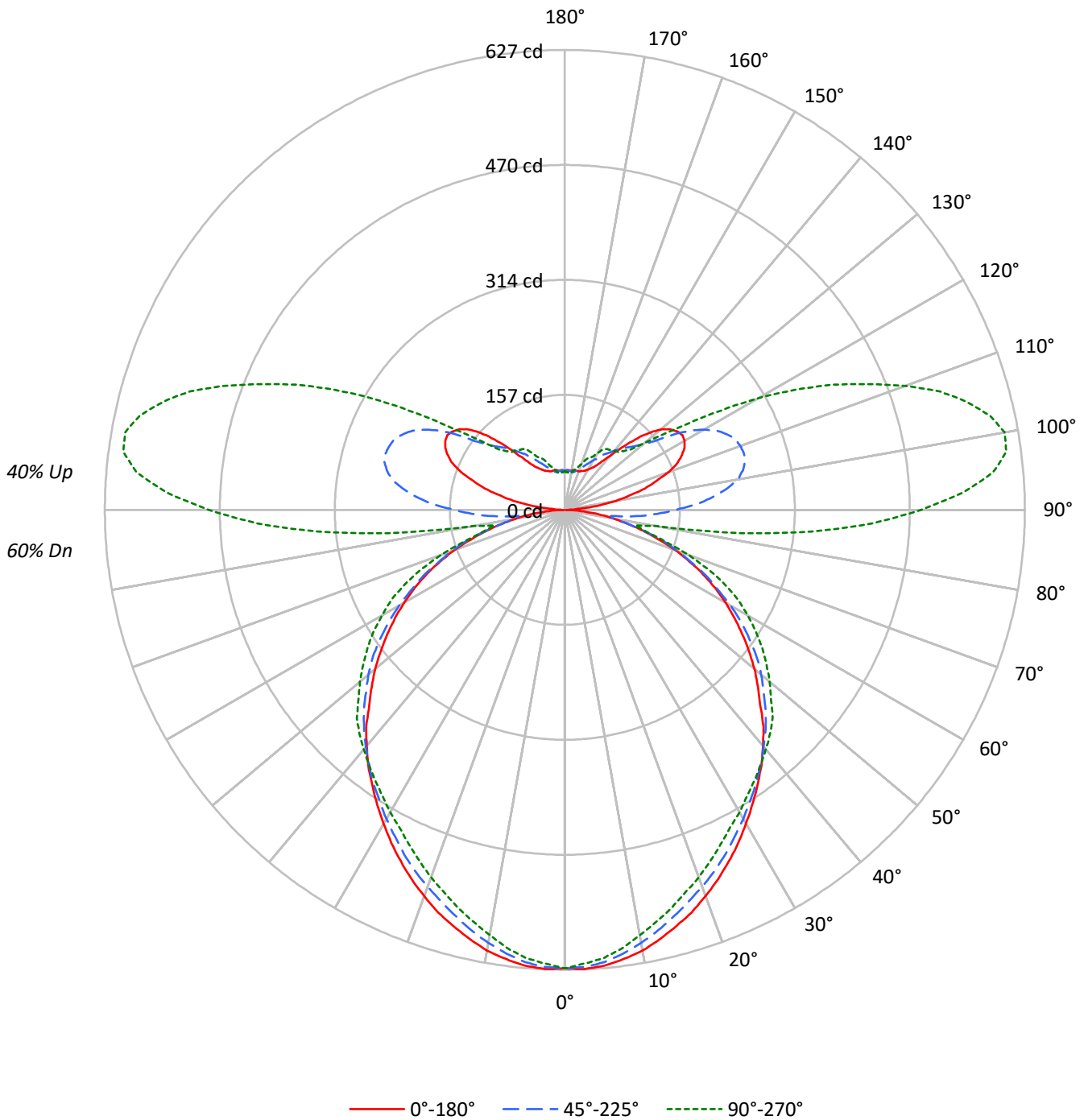
Lumens per Lamp: N/A
Luminaire Lumens: 3037.4 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')
CIE Type: General Diffuse

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°	2483	2483	2483
5°	2470	2390	2351
10°	2427	2267	2199
15°	2367	2144	2059
20°	2304	2033	1933
25°	2237	1932	1819
30°	2169	1833	1729
35°	2107	1746	1656
40°	2046	1662	1600
45°	1964	1580	1547
50°	1909	1491	1460
55°	1841	1384	1378
60°	1773	1253	1278
65°	1677	1105	1146
70°	1530	929	925
75°	1311	721	651
80°	1055	484	798
85°	620	842	2490



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	1.9
10°-20°	161.7	5.3
20°-30°	238.0	7.8
30°-40°	284.2	9.4
40°-50°	298.8	9.8
50°-60°	276.0	9.1
60°-70°	215.9	7.1
70°-80°	122.4	4.0
80°-90°	154.0	5.1
90°-100°	280.8	9.2
100°-110°	312.9	10.3
110°-120°	260.4	8.6
120°-130°	170.4	5.6
130°-140°	94.6	3.1
140°-150°	56.2	1.8
150°-160°	31.7	1.0
160°-170°	16.0	0.5
170°-180°	5.1	0.2
0°-30°	458.0	15.1
0°-40°	742.3	24.4
0°-60°	1317.0	43.4
0°-90°	1809.3	59.6
90°-120°	854.1	28.1
90°-150°	1175.2	38.7
90°-180°	1228.0	40.4
0°-180°	3037.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	625	625	625	625	625	
5°	624	619	619	614	613	59
15°	587	581	574	565	562	166
25°	529	524	518	508	503	244
35°	458	456	455	450	450	287
45°	377	378	387	396	401	292
55°	295	297	307	321	328	264
65°	208	206	212	235	241	205
75°	110	108	113	114	114	117
85°	26	33	98	253	339	30
90°	2	51	151	368	485	3
95°	24	86	203	453	586	30
105°	113	143	255	459	568	117
115°	176	176	244	343	404	172
125°	187	184	178	197	205	165
135°	136	125	120	108	113	105
145°	72	77	92	101	101	48
155°	59	59	68	75	78	27
165°	56	54	54	57	59	16
175°	54	54	53	53	51	5
180°	53	53	53	53	53	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	625.1	625.1	625.1	625.1	625.1
2.5°	626.6	622.1	623.6	622.1	619.1
5°	623.6	619.1	619.1	614.5	613.0
7.5°	617.6	611.5	610.0	604.0	602.5
10°	610.0	604.0	599.5	591.9	588.9
12.5°	599.5	593.5	587.4	579.9	575.4
15°	587.4	581.4	573.9	564.8	561.8
17.5°	575.4	567.8	560.3	551.3	546.8
20°	560.3	552.8	546.8	536.2	533.2
22.5°	545.3	539.2	533.2	521.2	518.1
25°	528.7	524.2	518.1	507.6	503.1
27.5°	512.1	507.6	501.6	492.5	488.0
30°	494.0	491.0	486.5	477.5	476.0
32.5°	476.0	474.5	469.9	463.9	462.4
35°	457.9	456.4	454.9	450.4	450.4
37.5°	439.8	438.3	438.3	436.8	438.3
40°	420.2	418.7	421.7	423.3	426.3
42.5°	400.7	400.7	405.2	411.2	414.2
45°	376.6	378.1	387.1	396.1	400.7
47.5°	357.0	358.5	367.5	378.1	381.1
50°	337.4	337.4	349.4	358.5	364.5
52.5°	316.3	317.8	329.9	340.4	346.4
55°	295.2	296.7	307.3	320.8	328.4
57.5°	274.1	274.1	284.7	299.7	308.8
60°	253.0	253.0	260.6	277.1	287.7
62.5°	230.5	230.5	235.0	257.6	266.6
65°	207.9	206.4	212.4	235.0	241.0
67.5°	183.8	182.3	186.8	209.4	210.9
70°	159.7	156.6	162.7	179.2	179.2
72.5°	134.1	132.5	140.1	146.1	143.1
75°	110.0	108.4	113.0	114.5	114.5
77.5°	87.4	87.4	87.4	90.4	97.9
80°	66.3	67.8	66.3	88.9	125.0
82.5°	46.7	46.7	63.3	174.7	242.5
85°	25.6	33.1	97.9	253.0	338.9
87.5°	10.5	37.7	126.5	314.8	420.2
90°	1.5	51.2	150.6	367.5	485.0
92.5°	9.0	70.8	180.7	418.7	543.7
95°	24.1	85.9	203.3	453.4	585.9
97.5°	48.2	102.4	222.9	477.5	607.0
100°	70.8	117.5	239.5	480.5	608.5
102.5°	90.4	131.0	248.5	474.5	593.5
105°	113.0	143.1	254.6	459.4	567.8
107.5°	131.0	153.6	256.1	435.3	536.2
110°	150.6	159.7	254.6	406.7	494.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.7	167.2	251.5	373.5	447.3
115°	176.2	176.2	244.0	343.4	403.7
117.5°	183.8	185.3	233.5	313.3	354.0
120°	188.3	189.8	218.4	278.7	304.3
122.5°	189.8	188.3	200.3	238.0	251.5
125°	186.8	183.8	177.7	197.3	204.8
127.5°	180.7	173.2	153.6	162.7	168.7
130°	170.2	158.2	138.6	134.1	141.6
132.5°	155.1	141.6	128.0	117.5	122.0
135°	135.6	125.0	120.5	108.4	113.0
137.5°	114.5	110.0	113.0	108.4	106.9
140°	96.4	97.9	105.4	105.4	105.4
142.5°	82.8	87.4	97.9	103.9	102.4
145°	72.3	76.8	91.9	100.9	100.9
147.5°	67.8	69.3	82.8	91.9	97.9
150°	63.3	64.8	78.3	85.9	88.9
152.5°	60.2	61.8	72.3	81.3	81.3
155°	58.7	58.7	67.8	75.3	78.3
157.5°	57.2	57.2	63.3	70.8	73.8
160°	55.7	55.7	60.2	67.8	66.3
162.5°	55.7	54.2	57.2	61.8	61.8
165°	55.7	54.2	54.2	57.2	58.7
167.5°	55.7	54.2	52.7	54.2	54.2
170°	54.2	54.2	52.7	52.7	51.2
172.5°	54.2	54.2	54.2	52.7	51.2
175°	54.2	54.2	52.7	52.7	51.2
177.5°	54.2	54.2	54.2	52.7	51.2
180°	52.7	52.7	52.7	52.7	52.7

(END OF REPORT)