

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: P243543

Luminaire Tested: **S124DR-H575D930-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243543
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-55)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H575D930-X4F0-XX-UDD-D-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1748.3 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.88' x H: 0.08')
CIE Type: Direct

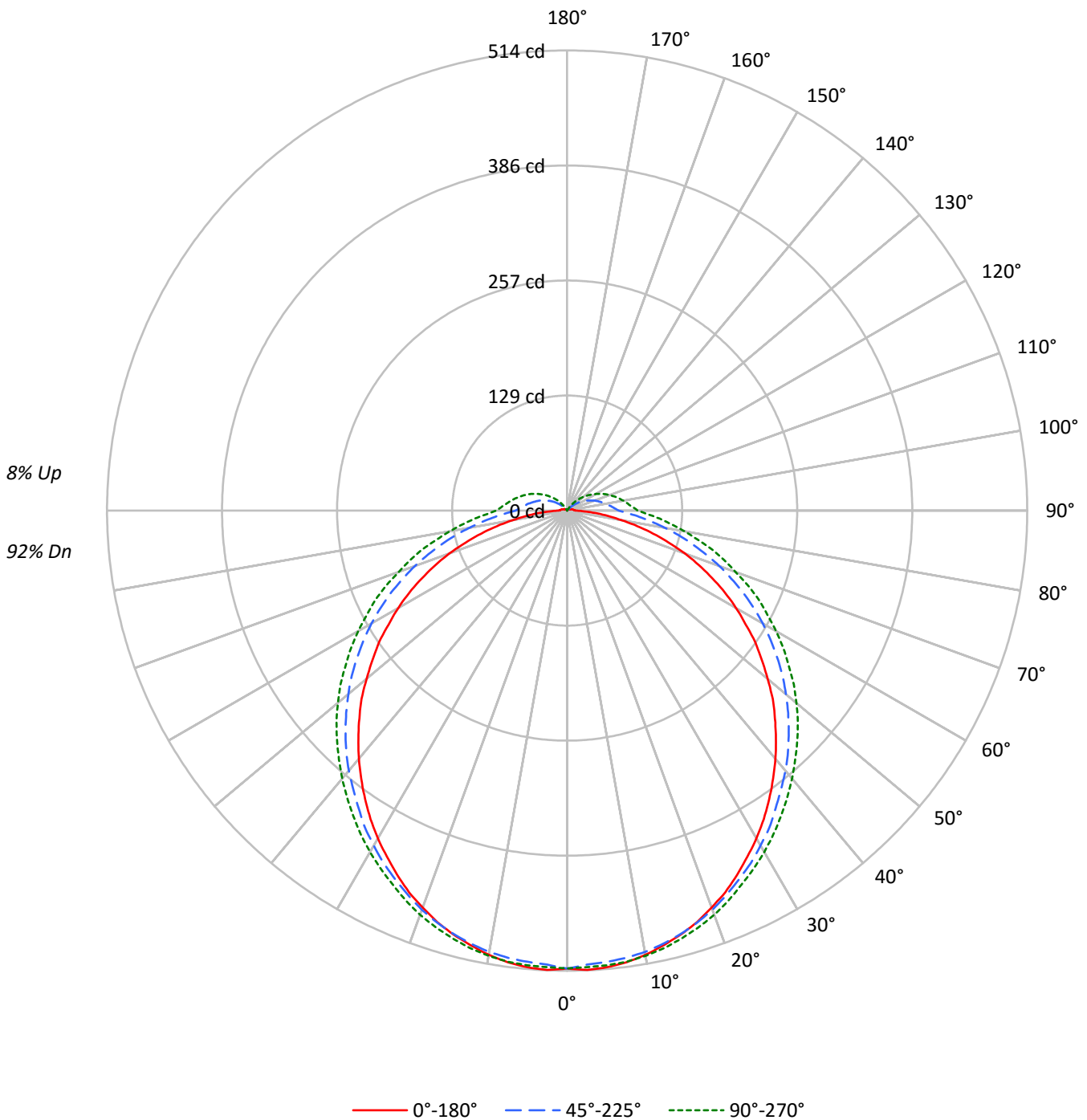
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92
1	105	100	95	91	102	97	93	89	91	88	84	86	83	80	81	79	77	74
2	95	86	79	73	92	84	77	71	79	73	68	74	70	66	70	67	63	60
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	46	55	49	45	43
5	72	59	50	43	70	58	49	42	55	47	41	52	45	40	49	43	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	44	39	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28
8	58	44	35	29	56	43	35	29	41	33	28	39	32	28	37	31	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	29	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4547	4547	4547
5°	4560	4436	4445
10°	4531	4362	4353
15°	4486	4273	4248
20°	4428	4179	4143
25°	4360	4070	4021
30°	4287	3968	3916
35°	4207	3856	3808
40°	4126	3760	3706
45°	4040	3655	3609
50°	3942	3551	3508
55°	3858	3438	3392
60°	3736	3314	3279
65°	3595	3175	3163
70°	3428	3016	3000
75°	3163	2821	2882
80°	2801	2634	2714
85°	2538	2482	2615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	2.8
10°-20°	138.8	7.9
20°-30°	210.2	12.0
30°-40°	254.5	14.6
40°-50°	269.2	15.4
50°-60°	253.6	14.5
60°-70°	210.7	12.1
70°-80°	148.1	8.5
80°-90°	83.4	4.8
90°-100°	49.5	2.8
100°-110°	36.6	2.1
110°-120°	24.5	1.4
120°-130°	13.8	0.8
130°-140°	5.9	0.3
140°-150°	1.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	397.4	22.7
0°-40°	651.9	37.3
0°-60°	1174.7	67.2
0°-90°	1616.9	92.5
90°-120°	110.6	6.3
90°-150°	131.4	7.5
90°-180°	131.0	7.5
0°-180°	1748.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	512	510	506	510	510	49
15°	490	491	490	495	495	138
25°	449	453	454	461	461	207
35°	394	400	406	415	416	246
45°	328	339	350	360	364	253
55°	257	270	286	299	302	229
65°	179	197	217	230	236	177
75°	100	121	145	161	167	105
85°	31	55	81	98	104	32
90°	9	32	58	73	79	6
95°	8	26	50	66	70	6
105°	5	17	38	52	57	6
115°	4	9	27	39	44	4
125°	2	2	16	27	30	2
135°	1	1	5	14	17	1
145°	0	0	0	3	5	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	511.5	511.5	511.5	511.5	511.5
2.5°	513.6	512.0	507.7	510.9	510.4
5°	512.0	509.8	506.0	510.4	509.8
7.5°	508.8	507.1	503.9	508.8	508.2
10°	503.9	502.8	500.6	505.0	505.0
12.5°	497.3	497.3	495.7	500.6	500.6
15°	490.3	491.4	489.7	495.2	494.6
17.5°	482.1	483.2	482.7	488.1	488.1
20°	471.8	473.4	474.5	480.5	480.5
22.5°	461.5	463.6	464.7	471.3	471.3
25°	449.0	452.8	454.4	460.9	460.9
27.5°	435.9	440.8	444.1	450.1	451.1
30°	422.9	428.3	432.1	438.6	440.3
32.5°	408.7	414.2	420.2	426.7	428.9
35°	393.5	400.0	406.0	414.7	416.4
37.5°	377.8	385.4	392.4	401.7	403.9
40°	362.0	371.2	379.4	388.1	390.8
42.5°	345.2	354.4	365.3	374.5	377.2
45°	328.3	338.6	350.0	360.4	363.6
47.5°	311.5	322.3	334.8	345.7	349.5
50°	292.4	304.4	319.1	329.9	334.3
52.5°	273.9	287.0	303.3	314.2	319.1
55°	256.6	270.1	286.4	298.9	302.2
57.5°	236.4	251.7	269.6	283.2	286.4
60°	218.0	233.2	252.2	265.8	269.6
62.5°	198.9	215.2	234.8	248.4	252.2
65°	178.8	196.8	216.9	230.5	236.4
67.5°	159.3	177.2	198.4	213.6	218.5
70°	139.7	158.2	181.0	196.2	200.0
72.5°	119.0	139.1	162.5	178.3	183.7
75°	99.5	120.7	144.6	160.9	167.4
77.5°	80.4	102.7	127.7	144.6	148.9
80°	61.4	85.9	110.9	127.7	133.2
82.5°	46.2	69.0	95.1	113.1	117.4
85°	31.0	54.9	81.0	98.4	103.8
87.5°	18.5	42.9	67.9	84.2	89.7
90°	9.2	32.1	57.6	73.4	78.8
92.5°	8.2	28.8	53.3	69.0	74.5
95°	7.6	26.1	50.0	65.8	70.1
97.5°	7.1	23.9	46.7	62.0	66.9
100°	6.5	21.2	44.0	58.7	63.6
102.5°	6.0	19.0	40.8	55.4	60.3
105°	5.4	16.8	38.0	52.2	57.1
107.5°	4.9	14.7	35.3	48.9	53.8
110°	4.3	12.5	32.6	45.7	50.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.8	10.9	29.4	42.4	47.3
115°	3.8	8.7	26.6	39.1	44.0
117.5°	3.3	6.5	23.9	35.9	40.2
120°	3.3	4.9	21.2	32.6	37.0
122.5°	2.7	3.3	18.5	29.9	33.7
125°	2.2	1.6	15.8	26.6	30.4
127.5°	2.2	1.6	13.0	23.4	27.2
130°	1.6	1.6	10.3	20.1	23.9
132.5°	1.6	1.1	7.6	17.4	20.7
135°	1.1	1.1	4.9	14.1	17.4
137.5°	1.1	0.5	3.3	11.4	14.7
140°	1.1	0.5	1.1	8.7	11.4
142.5°	0.5	0.5	0.0	6.0	8.2
145°	0.5	0.0	0.0	3.3	5.4
147.5°	0.5	0.0	0.0	0.5	2.7
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)