

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: P243470

Luminaire Tested: **S124DR-H795D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-84)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H795D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3195.1 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

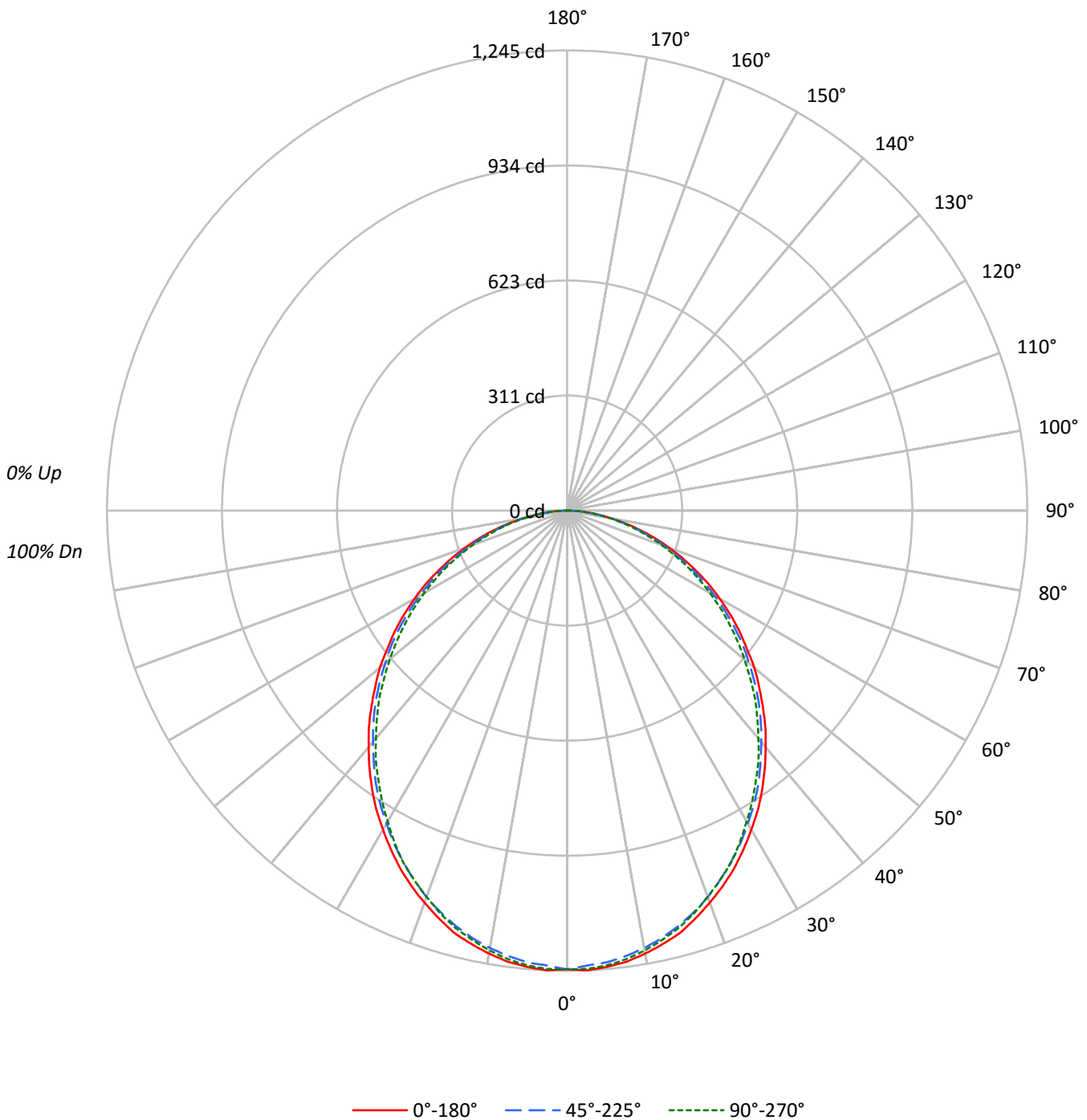
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11032	11032	11032
5°	11056	10948	11021
10°	10984	10847	10911
15°	10883	10706	10752
20°	10680	10527	10518
25°	10479	10291	10301
30°	10230	10033	9972
35°	9983	9786	9665
40°	9691	9480	9340
45°	9407	9217	9038
50°	9148	8882	8658
55°	8812	8576	8310
60°	8475	8187	7936
65°	8070	7795	7540
70°	7638	7295	7061
75°	7041	6762	6556
80°	6204	6102	5943
85°	5456	5456	5354



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	3.7
10°-20°	329.9	10.3
20°-30°	485.9	15.2
30°-40°	565.3	17.7
40°-50°	565.5	17.7
50°-60°	494.6	15.5
60°-70°	367.3	11.5
70°-80°	209.3	6.6
80°-90°	60.3	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	932.8	29.2
0°-40°	1498.0	46.9
0°-60°	2558.2	80.1
0°-90°	3195.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3195.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1239	1237	1227	1236	1235	118
15°	1183	1176	1163	1170	1168	333
25°	1068	1063	1049	1052	1050	492
35°	920	912	902	894	891	575
45°	748	745	733	722	719	578
55°	569	564	553	541	536	508
65°	384	381	371	362	358	381
75°	205	201	197	193	191	217
85°	54	52	54	52	52	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1241.1	1241.1	1241.1	1241.1	1241.1
2.5°	1245.2	1242.1	1232.0	1242.1	1241.1
5°	1239.1	1237.1	1227.0	1236.1	1235.1
7.5°	1231.0	1227.0	1215.9	1225.0	1224.0
10°	1216.9	1213.9	1201.7	1210.8	1208.8
12.5°	1200.7	1197.7	1184.6	1191.6	1189.6
15°	1182.6	1176.5	1163.4	1170.4	1168.4
17.5°	1156.3	1152.3	1139.1	1145.2	1142.2
20°	1129.0	1124.0	1112.9	1113.9	1111.9
22.5°	1099.7	1094.7	1081.6	1085.6	1081.6
25°	1068.4	1063.4	1049.3	1052.3	1050.3
27.5°	1033.1	1028.0	1014.9	1015.9	1011.9
30°	996.7	990.7	977.5	976.5	971.5
32.5°	960.4	954.3	941.2	937.2	932.1
35°	920.0	911.9	901.8	893.7	890.7
37.5°	878.6	874.5	859.4	854.3	850.3
40°	835.2	831.1	817.0	809.9	804.9
42.5°	793.8	788.7	775.6	765.5	761.4
45°	748.3	745.3	733.2	722.1	719.0
47.5°	703.9	702.9	687.7	676.6	671.6
50°	661.5	655.4	642.3	632.2	626.1
52.5°	612.0	611.0	599.9	586.7	581.7
55°	568.6	564.5	553.4	541.3	536.2
57.5°	523.1	521.1	507.0	496.9	491.8
60°	476.7	472.6	460.5	451.4	446.4
62.5°	432.2	427.2	416.1	407.0	401.9
65°	383.7	380.7	370.6	362.5	358.5
67.5°	338.3	334.3	324.2	317.1	313.1
70°	293.9	287.8	280.7	274.7	271.7
72.5°	249.4	244.4	238.3	234.3	230.2
75°	205.0	201.0	196.9	192.9	190.9
77.5°	162.6	158.5	156.5	155.5	153.5
80°	121.2	119.2	119.2	118.2	116.1
82.5°	85.8	83.8	83.8	83.8	82.8
85°	53.5	52.5	53.5	51.5	52.5
87.5°	25.2	25.2	26.3	25.2	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)