

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: P243461

Luminaire Tested: **S124DR-H795D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243461
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-H795D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2982.1 lumens
Efficiency: N/A
Efficacy: 126.4 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

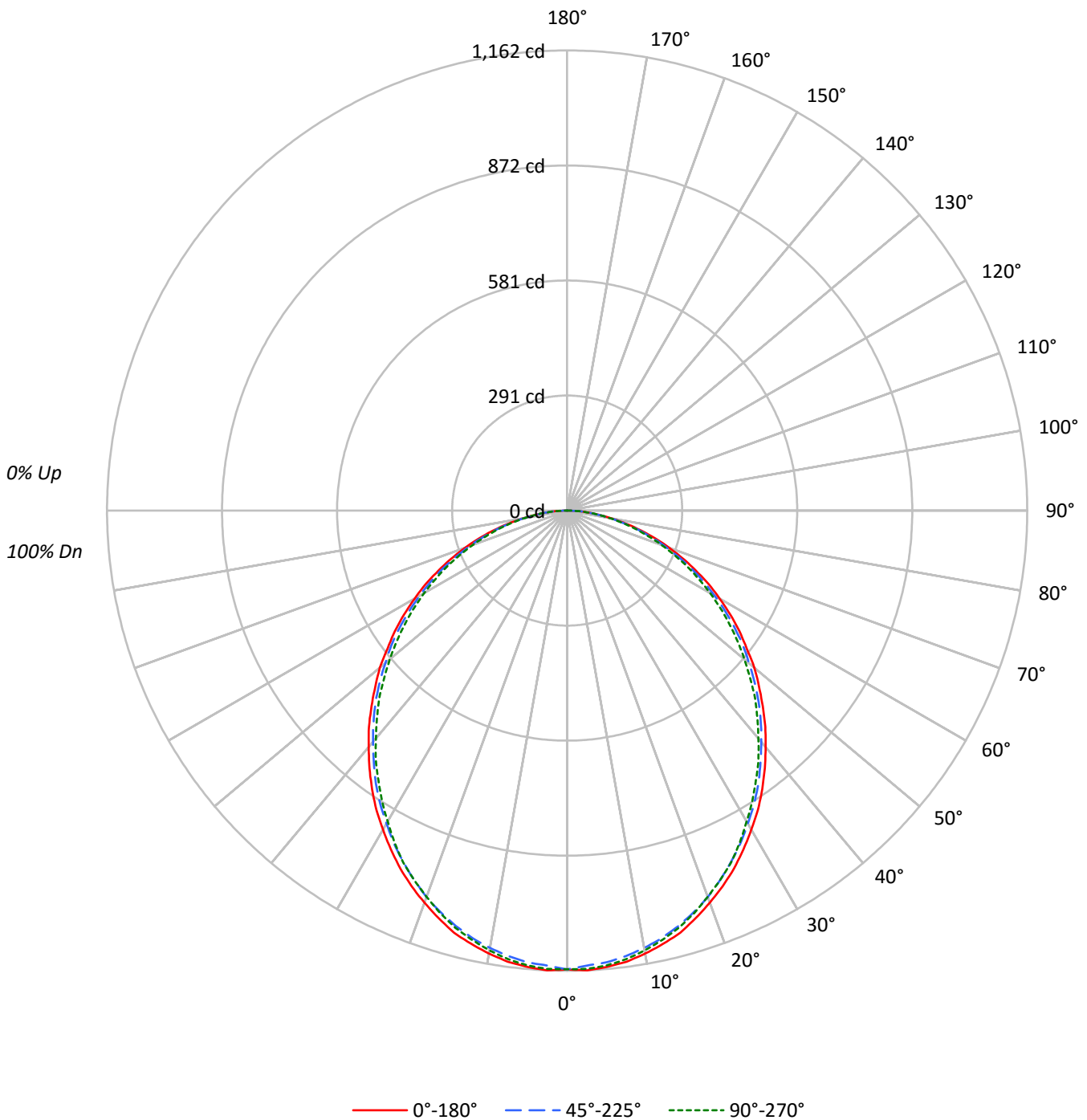
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10297	10297	10297
5°	10319	10218	10285
10°	10252	10124	10183
15°	10157	9992	10035
20°	9968	9825	9816
25°	9780	9605	9614
30°	9549	9365	9306
35°	9318	9134	9021
40°	9045	8848	8717
45°	8779	8602	8436
50°	8538	8290	8081
55°	8224	8004	7756
60°	7909	7641	7406
65°	7534	7275	7038
70°	7129	6809	6588
75°	6570	6312	6117
80°	5789	5692	5549
85°	5099	5099	4997



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	3.7
10°-20°	307.9	10.3
20°-30°	453.5	15.2
30°-40°	527.6	17.7
40°-50°	527.8	17.7
50°-60°	461.6	15.5
60°-70°	342.8	11.5
70°-80°	195.3	6.6
80°-90°	56.3	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°	870.6	29.2
0°-40°	1398.2	46.9
0°-60°	2387.6	80.1
0°-90°	2982.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2982.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1156	1155	1145	1154	1153	110
15°	1104	1098	1086	1092	1090	311
25°	997	992	979	982	980	459
35°	859	851	842	834	831	537
45°	698	696	684	674	671	539
55°	531	527	516	505	500	474
65°	358	355	346	338	335	356
75°	191	188	184	180	178	203
85°	50	49	50	48	49	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.4	1158.4	1158.4	1158.4	1158.4
2.5°	1162.2	1159.3	1149.9	1159.3	1158.4
5°	1156.5	1154.6	1145.2	1153.7	1152.7
7.5°	1149.0	1145.2	1134.8	1143.3	1142.4
10°	1135.8	1132.9	1121.6	1130.1	1128.2
12.5°	1120.7	1117.9	1105.6	1112.2	1110.3
15°	1103.7	1098.1	1085.8	1092.4	1090.5
17.5°	1079.2	1075.4	1063.2	1068.8	1066.0
20°	1053.8	1049.1	1038.7	1039.6	1037.7
22.5°	1026.4	1021.7	1009.5	1013.2	1009.5
25°	997.2	992.5	979.3	982.1	980.2
27.5°	964.2	959.5	947.3	948.2	944.4
30°	930.3	924.6	912.4	911.4	906.7
32.5°	896.4	890.7	878.5	874.7	870.0
35°	858.7	851.1	841.7	834.2	831.3
37.5°	820.0	816.2	802.1	797.4	793.6
40°	779.5	775.7	762.5	755.9	751.2
42.5°	740.8	736.1	723.9	714.4	710.7
45°	698.4	695.6	684.3	673.9	671.1
47.5°	657.0	656.0	641.9	631.5	626.8
50°	617.4	611.7	599.5	590.0	584.4
52.5°	571.2	570.2	559.9	547.6	542.9
55°	530.7	526.9	516.5	505.2	500.5
57.5°	488.2	486.4	473.2	463.7	459.0
60°	444.9	441.1	429.8	421.3	416.6
62.5°	403.4	398.7	388.3	379.8	375.1
65°	358.2	355.3	345.9	338.4	334.6
67.5°	315.8	312.0	302.6	296.0	292.2
70°	274.3	268.6	262.0	256.4	253.5
72.5°	232.8	228.1	222.4	218.7	214.9
75°	191.3	187.6	183.8	180.0	178.1
77.5°	151.7	148.0	146.1	145.2	143.3
80°	113.1	111.2	111.2	110.3	108.4
82.5°	80.1	78.2	78.2	78.2	77.3
85°	50.0	49.0	50.0	48.1	49.0
87.5°	23.6	23.6	24.5	23.6	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)