

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: P243485

Luminaire Tested: **S124DR-H795D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243485
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-H795D940-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2821.3 lumens
Efficiency: N/A
Efficacy: 119.5 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

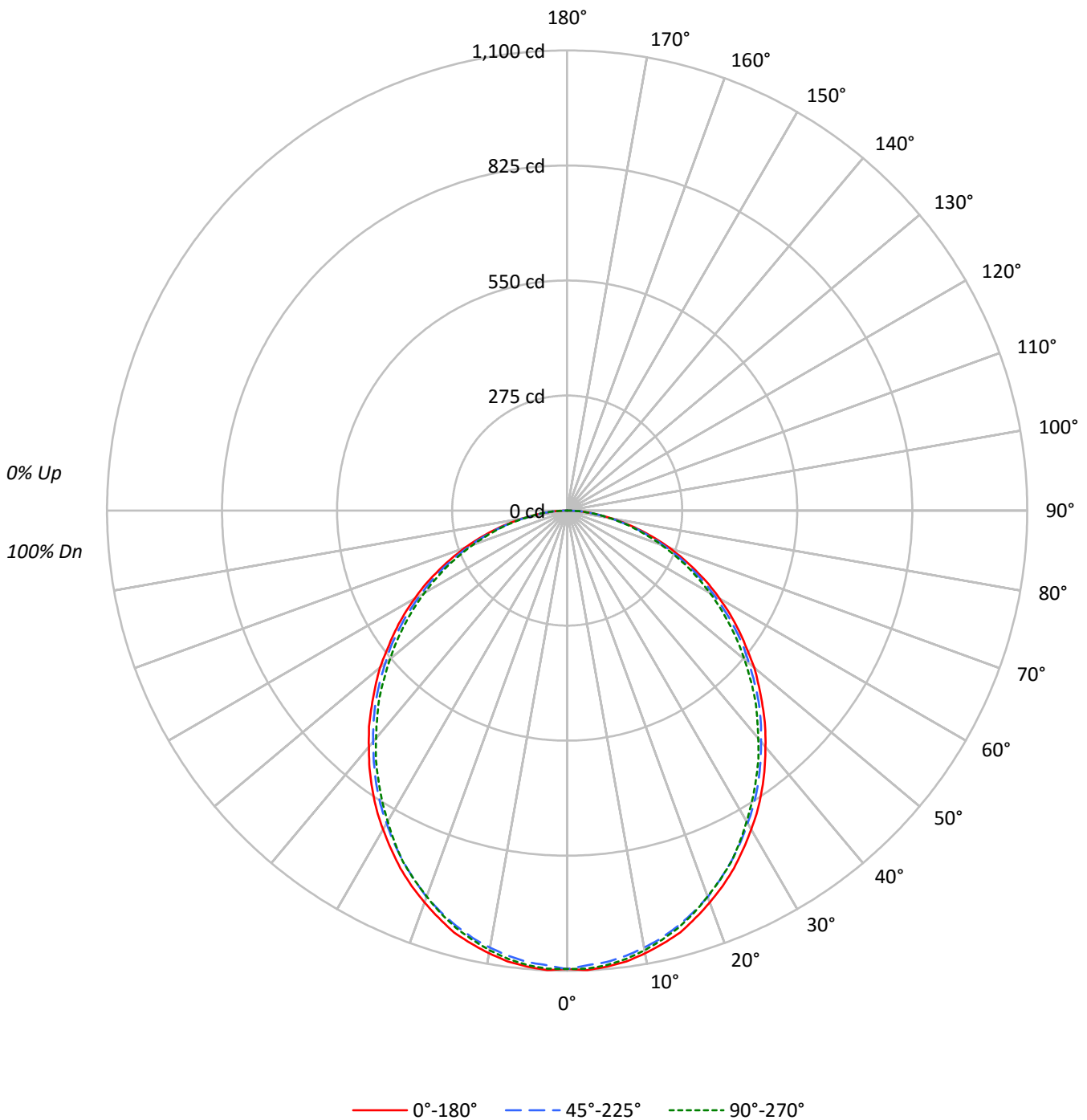
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9741	9741	9741
5°	9763	9667	9731
10°	9698	9578	9634
15°	9609	9454	9494
20°	9430	9296	9287
25°	9253	9087	9096
30°	9033	8860	8804
35°	8815	8641	8535
40°	8557	8371	8247
45°	8307	8138	7981
50°	8077	7842	7646
55°	7780	7574	7338
60°	7483	7228	7006
65°	7128	6884	6659
70°	6744	6443	6235
75°	6216	5972	5787
80°	5477	5385	5247
85°	4824	4824	4732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	3.7
10°-20°	291.3	10.3
20°-30°	429.0	15.2
30°-40°	499.1	17.7
40°-50°	499.4	17.7
50°-60°	436.7	15.5
60°-70°	324.4	11.5
70°-80°	184.8	6.5
80°-90°	53.2	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°	823.7	29.2
0°-40°	1322.8	46.9
0°-60°	2258.9	80.1
0°-90°	2821.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2821.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1094	1092	1083	1092	1091	104
15°	1044	1039	1027	1034	1032	294
25°	943	939	926	929	927	434
35°	812	805	796	789	786	508
45°	661	658	647	638	635	510
55°	502	498	489	478	474	449
65°	339	336	327	320	317	336
75°	181	178	174	170	168	192
85°	47	46	47	46	46	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1095.9	1095.9	1095.9	1095.9	1095.9
2.5°	1099.5	1096.8	1087.9	1096.8	1095.9
5°	1094.1	1092.3	1083.4	1091.5	1090.6
7.5°	1087.0	1083.4	1073.6	1081.6	1080.8
10°	1074.5	1071.8	1061.1	1069.2	1067.4
12.5°	1060.2	1057.6	1046.0	1052.2	1050.4
15°	1044.2	1038.8	1027.3	1033.5	1031.7
17.5°	1021.0	1017.4	1005.9	1011.2	1008.5
20°	996.9	992.5	982.7	983.6	981.8
22.5°	971.1	966.6	955.0	958.6	955.0
25°	943.4	939.0	926.5	929.2	927.4
27.5°	912.2	907.8	896.2	897.1	893.5
30°	880.1	874.8	863.2	862.3	857.8
32.5°	848.0	842.7	831.1	827.5	823.0
35°	812.3	805.2	796.3	789.2	786.5
37.5°	775.8	772.2	758.8	754.4	750.8
40°	737.4	733.9	721.4	715.2	710.7
42.5°	700.9	696.4	684.8	675.9	672.4
45°	660.8	658.1	647.4	637.6	634.9
47.5°	621.5	620.6	607.3	597.4	593.0
50°	584.1	578.7	567.1	558.2	552.9
52.5°	540.4	539.5	529.7	518.1	513.6
55°	502.0	498.5	488.7	478.0	473.5
57.5°	461.9	460.1	447.6	438.7	434.3
60°	420.9	417.3	406.6	398.6	394.1
62.5°	381.7	377.2	367.4	359.4	354.9
65°	338.9	336.2	327.3	320.1	316.6
67.5°	298.7	295.2	286.2	280.0	276.4
70°	259.5	254.1	247.9	242.5	239.9
72.5°	220.3	215.8	210.4	206.9	203.3
75°	181.0	177.5	173.9	170.3	168.5
77.5°	143.6	140.0	138.2	137.3	135.5
80°	107.0	105.2	105.2	104.3	102.5
82.5°	75.8	74.0	74.0	74.0	73.1
85°	47.3	46.4	47.3	45.5	46.4
87.5°	22.3	22.3	23.2	22.3	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)