

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: P243476

Luminaire Tested: **S124DR-H1020D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243476
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-H1020D930-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH 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: 3326.6 lumens
Efficiency: N/A
Efficacy: 105.6 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

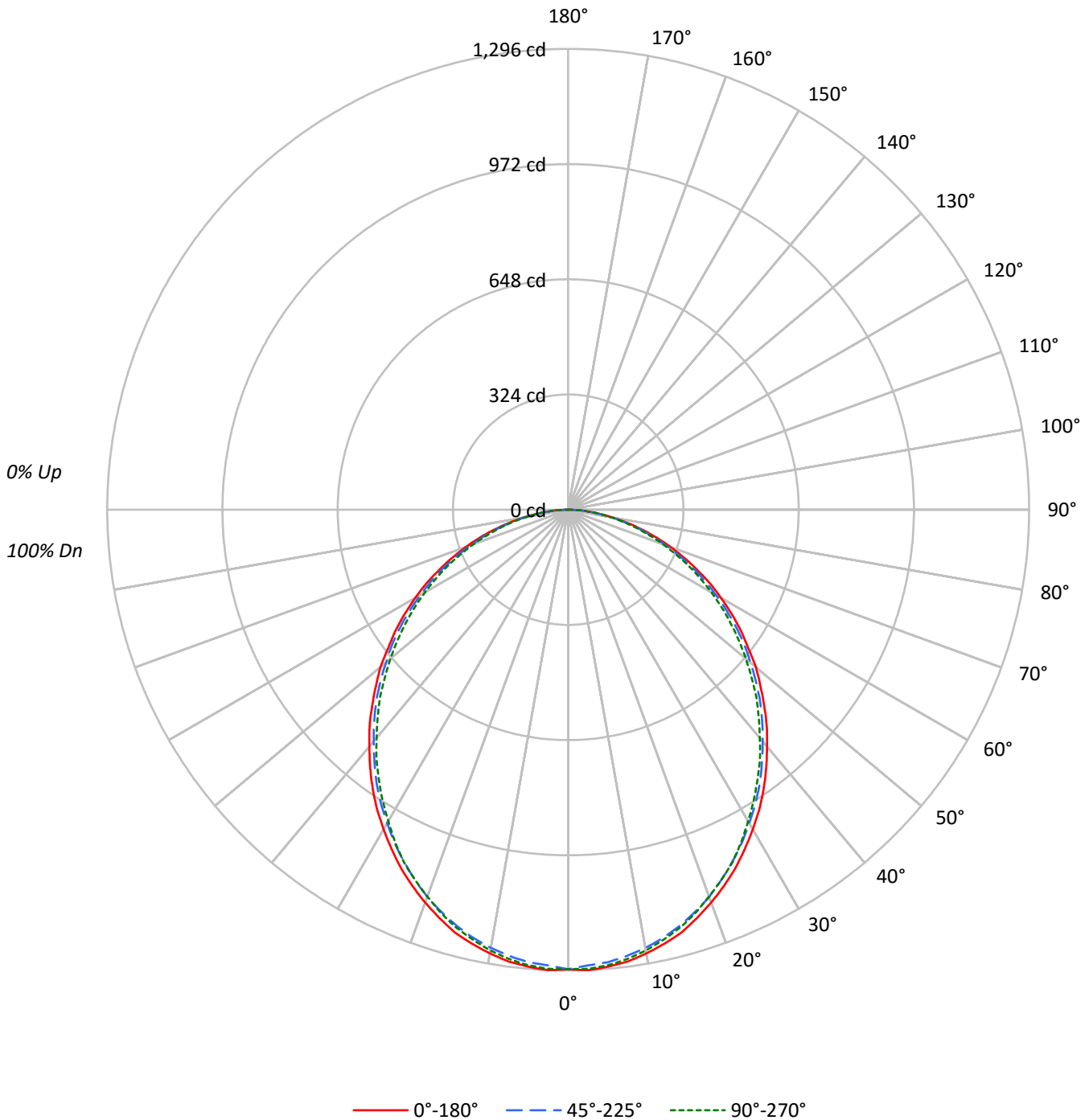
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11486	11486	11486
5°	11511	11399	11474
10°	11436	11293	11360
15°	11330	11147	11195
20°	11120	10961	10950
25°	10910	10714	10725
30°	10652	10447	10382
35°	10395	10188	10064
40°	10089	9870	9724
45°	9794	9595	9411
50°	9524	9247	9015
55°	9174	8930	8652
60°	8823	8524	8261
65°	8403	8117	7852
70°	7953	7597	7350
75°	7329	7041	6824
80°	6460	6353	6189
85°	5681	5681	5579



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.8	3.7
10°-20°	343.5	10.3
20°-30°	505.9	15.2
30°-40°	588.5	17.7
40°-50°	588.8	17.7
50°-60°	514.9	15.5
60°-70°	382.5	11.5
70°-80°	217.9	6.5
80°-90°	62.8	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°	971.2	29.2
0°-40°	1559.7	46.9
0°-60°	2663.5	80.1
0°-90°	3326.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3326.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1292	1292	1292	1292	1292	
5°	1290	1288	1278	1287	1286	122
15°	1231	1225	1211	1219	1216	346
25°	1112	1107	1092	1096	1094	512
35°	958	949	939	930	927	599
45°	779	776	763	752	749	602
55°	592	588	576	564	558	529
65°	400	396	386	378	373	397
75°	213	209	205	201	199	226
85°	56	55	56	54	55	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1292.2	1292.2	1292.2	1292.2	1292.2
2.5°	1296.4	1293.3	1282.7	1293.3	1292.2
5°	1290.1	1288.0	1277.5	1287.0	1285.9
7.5°	1281.7	1277.5	1265.9	1275.4	1274.3
10°	1267.0	1263.8	1251.2	1260.7	1258.6
12.5°	1250.2	1247.0	1233.3	1240.7	1238.6
15°	1231.2	1224.9	1211.3	1218.6	1216.5
17.5°	1203.9	1199.7	1186.0	1192.3	1189.2
20°	1175.5	1170.2	1158.7	1159.7	1157.6
22.5°	1145.0	1139.8	1126.1	1130.3	1126.1
25°	1112.4	1107.2	1092.4	1095.6	1093.5
27.5°	1075.6	1070.4	1056.7	1057.7	1053.5
30°	1037.8	1031.5	1017.8	1016.7	1011.5
32.5°	999.9	993.6	979.9	975.7	970.5
35°	957.9	949.4	938.9	930.5	927.4
37.5°	914.7	910.5	894.8	889.5	885.3
40°	869.5	865.3	850.6	843.2	838.0
42.5°	826.4	821.2	807.5	797.0	792.8
45°	779.1	776.0	763.3	751.8	748.6
47.5°	732.8	731.8	716.0	704.5	699.2
50°	688.7	682.4	668.7	658.2	651.9
52.5°	637.2	636.1	624.6	610.9	605.6
55°	592.0	587.8	576.2	563.6	558.3
57.5°	544.6	542.5	527.8	517.3	512.0
60°	496.3	492.1	479.5	470.0	464.7
62.5°	450.0	444.8	433.2	423.7	418.5
65°	399.5	396.4	385.9	377.5	373.3
67.5°	352.2	348.0	337.5	330.1	325.9
70°	306.0	299.7	292.3	286.0	282.8
72.5°	259.7	254.4	248.1	243.9	239.7
75°	213.4	209.2	205.0	200.8	198.7
77.5°	169.3	165.1	163.0	161.9	159.8
80°	126.2	124.1	124.1	123.0	120.9
82.5°	89.4	87.3	87.3	87.3	86.2
85°	55.7	54.7	55.7	53.6	54.7
87.5°	26.3	26.3	27.3	26.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)