

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: P231693

Luminaire Tested: **S124-DR-1-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29680)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-DR-1-35-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

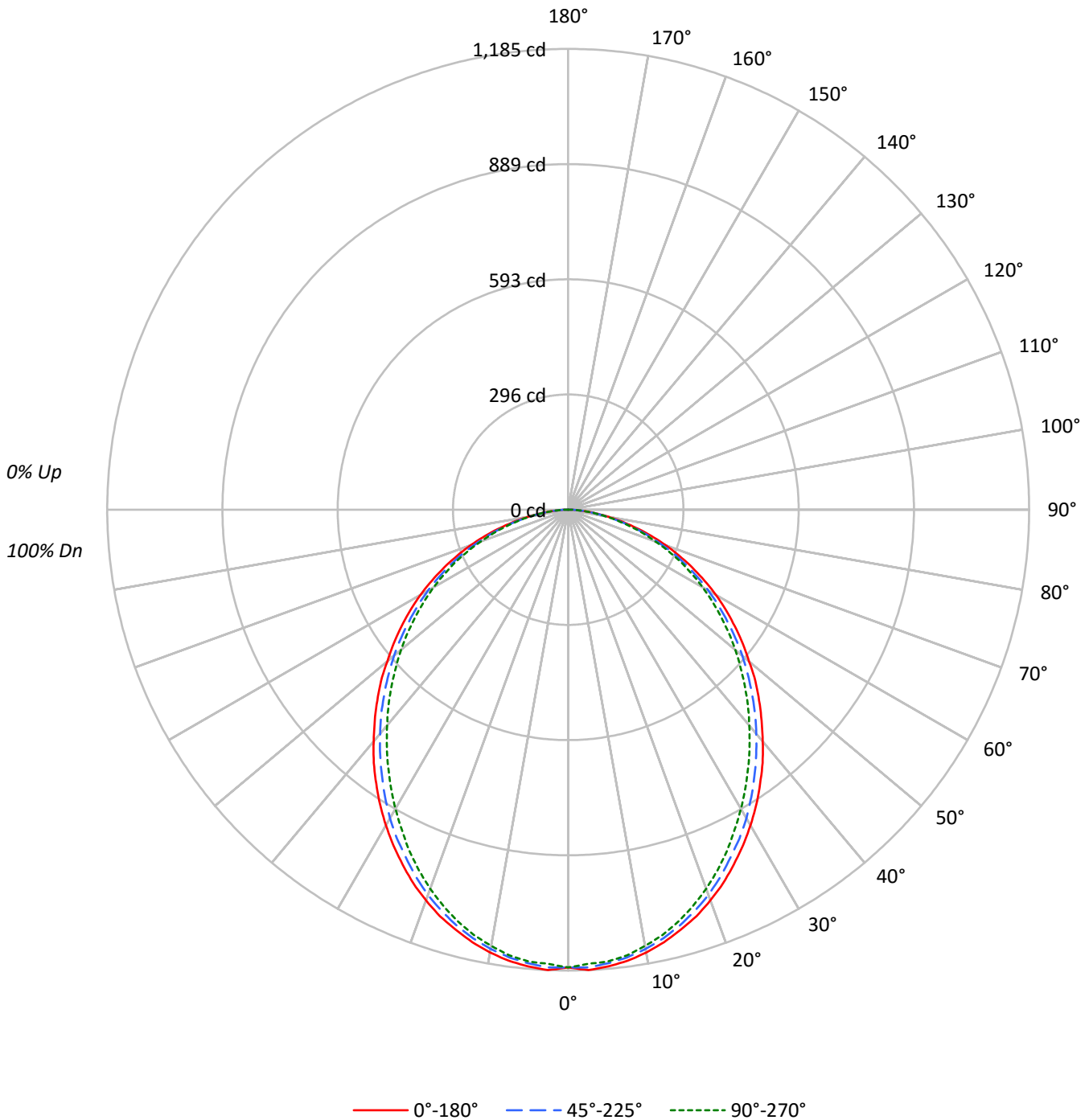
Lumens per Lamp: N/A
Luminaire Lumens: 2918.5 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.27
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 28
Input Voltage (V): 120
Input Current (Ain): 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	97	106	102	98	95	98	95	92	94	92	89	90	88	87	84
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10547	10547	10547
5°	10605	10533	10488
10°	10518	10436	10364
15°	10371	10269	10167
20°	10194	10051	9888
25°	9956	9758	9561
30°	9695	9478	9188
35°	9407	9134	8828
40°	9100	8796	8469
45°	8794	8465	8136
50°	8462	8141	7820
55°	8170	7796	7483
60°	7867	7455	7151
65°	7463	7060	6785
70°	6969	6497	6235
75°	6266	5886	5712
80°	5367	5109	5057
85°	4524	4318	4215



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	3.8
10°-20°	310.9	10.7
20°-30°	453.0	15.5
30°-40°	520.2	17.8
40°-50°	514.5	17.6
50°-60°	447.0	15.3
60°-70°	330.5	11.3
70°-80°	182.1	6.2
80°-90°	49.5	1.7
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°	874.7	30.0
0°-40°	1395.0	47.8
0°-60°	2356.4	80.7
0°-90°	2918.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2918.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1179	1166	1171	1167	1166	112
15°	1118	1105	1107	1098	1096	315
25°	1007	993	987	969	967	464
35°	860	846	835	812	807	538
45°	694	683	668	648	642	536
55°	523	515	499	483	479	468
65°	352	346	333	322	320	348
75°	181	175	170	166	165	193
85°	44	43	42	42	41	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1177	1177	1177	1177	1177
2.5°	1185	1173	1178	1175	1169
5°	1179	1166	1171	1167	1166
7.5°	1170	1157	1161	1156	1156
10°	1156	1143	1147	1140	1139
12.5°	1139	1125	1129	1120	1120
15°	1118	1105	1107	1098	1096
17.5°	1096	1081	1082	1071	1068
20°	1069	1054	1054	1039	1037
22.5°	1040	1025	1022	1005	1003
25°	1007	993	987	969	967
27.5°	973	959	953	932	927
30°	937	922	916	892	888
32.5°	900	885	876	853	848
35°	860	846	835	812	807
37.5°	821	807	794	771	766
40°	778	765	752	729	724
42.5°	736	725	711	689	684
45°	694	683	668	648	642
47.5°	653	641	626	605	601
50°	607	599	584	565	561
52.5°	566	556	542	524	520
55°	523	515	499	483	479
57.5°	481	473	458	443	439
60°	439	430	416	403	399
62.5°	395	388	374	362	359
65°	352	346	333	322	320
67.5°	309	302	292	283	279
70°	266	260	248	241	238
72.5°	223	216	209	204	202
75°	181	175	170	166	165
77.5°	142	137	133	131	130
80°	104	102	99	98	98
82.5°	71	70	69	68	68
85°	44	43	42	42	41
87.5°	21	20	21	20	20
90°	0	0	0	0	0

(END OF REPORT)