

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: METALUX

Report Number: P295272

Luminaire Tested: **UHB-12-UNV-L840-CD-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P295272
Test Lab: Standard-Tech Co., Ltd Testing Center
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: UHB-12-UNV-L840-CD-U
Description: UHB 100W 4000K ROUND HIGH BAY LED WITH CLEAR RING LENS
Light Source: 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

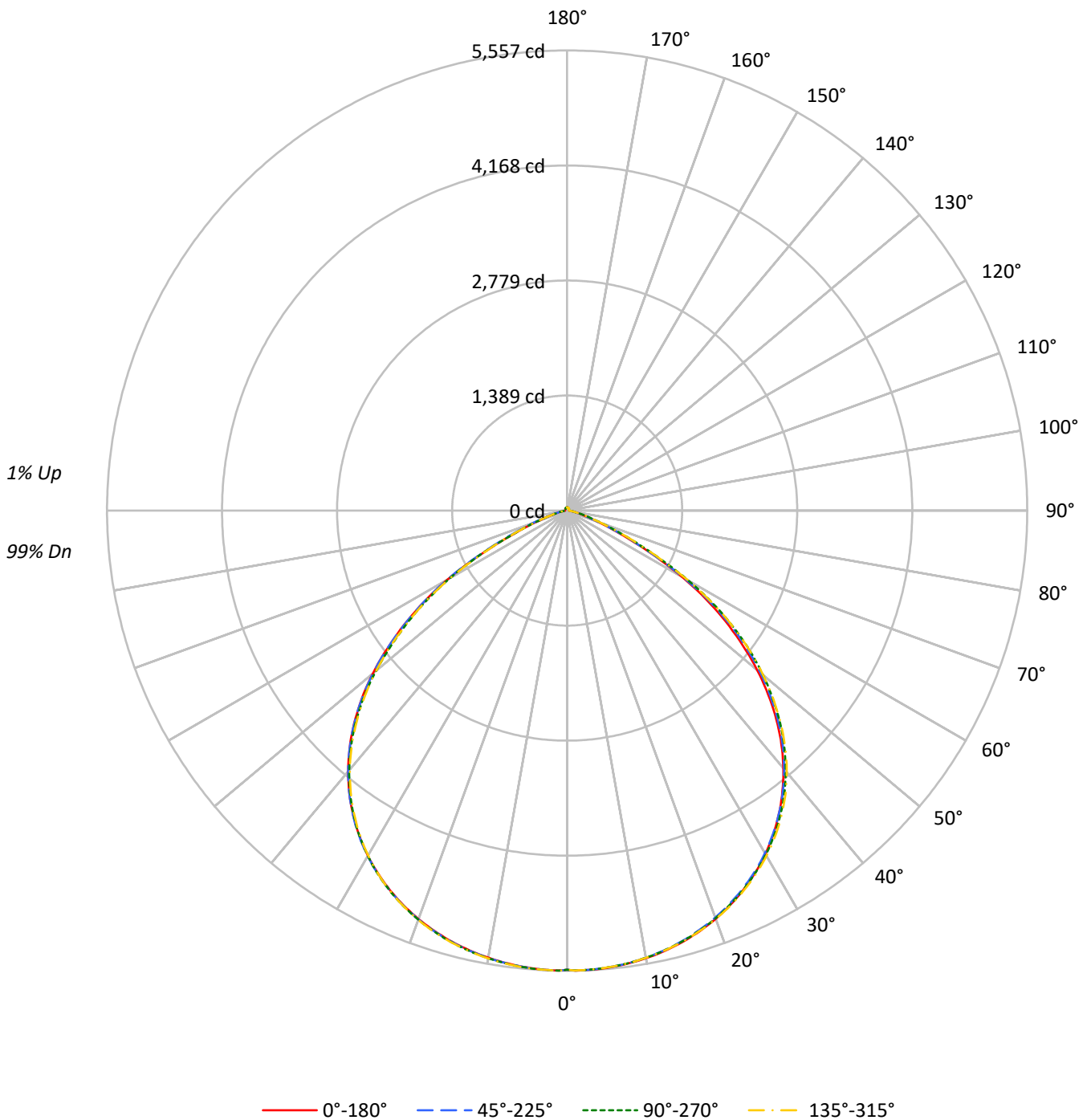
Lumens per Lamp: N/A
Luminaire Lumens: 13435.8 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.37
Luminous Opening: Circular (Dia: 0.26m x H: 0m)
CIE Type: Direct

Input Watts (W): 99.0307
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	110	110	110	105	105	105	101	101	101	99
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	92	90	89	87
2	102	95	89	84	99	93	88	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	91	83	76	71	80	74	70	77	72	68	74	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	69	64	59	67	62	59	57
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	55	50	46	44
7	69	56	48	42	67	55	47	42	54	47	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	38	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	104417	104417	104417	104417
5°	104791	104727	104721	104787
10°	104987	104865	104871	105006
15°	105136	104984	105062	105232
20°	105153	105017	105199	105382
25°	104868	104845	105136	105294
30°	104115	104348	104702	104716
35°	102582	103235	103499	103331
40°	99859	100948	101159	100672
45°	95236	96923	96917	96107
50°	87780	90455	89804	88269
55°	76788	80268	78876	76991
60°	60351	63730	63048	61692
65°	38194	41358	39246	40097
70°	21433	24644	20954	21543
75°	12655	14846	11927	11731
80°	8927	9838	8417	8048
85°	6483	6743	7153	6980



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	527.2	3.9
10°-20°	1522.0	11.3
20°-30°	2328.5	17.3
30°-40°	2802.1	20.9
40°-50°	2779.0	20.7
50°-60°	2122.2	15.8
60°-70°	931.2	6.9
70°-80°	211.8	1.6
80°-90°	42.7	0.3
90°-100°	23.5	0.2
100°-110°	23.7	0.2
110°-120°	24.3	0.2
120°-130°	24.5	0.2
130°-140°	23.0	0.2
140°-150°	20.0	0.1
150°-160°	16.0	0.1
160°-170°	10.5	0.1
170°-180°	3.6	0.0
0°-30°	4377.6	32.6
0°-40°	7179.7	53.4
0°-60°	12080.9	89.9
0°-90°	13266.6	98.7
90°-120°	71.6	0.5
90°-150°	139.1	1.0
90°-180°	169.0	1.3
0°-180°	13435.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5544	5544	5544	5544	5544	
5°	5542	5539	5539	5542	5542	527
15°	5392	5384	5388	5397	5392	1522
25°	5046	5045	5059	5067	5046	2325
35°	4461	4490	4501	4494	4461	2786
45°	3575	3639	3638	3608	3575	2744
55°	2338	2444	2402	2345	2338	2073
65°	857	928	881	900	857	895
75°	174	204	164	161	174	207
85°	30	31	33	32	30	36
90°	21	22	22	21	21	12
95°	21	22	22	21	21	17
105°	22	23	23	22	22	23
115°	23	26	25	24	23	23
125°	26	29	28	26	26	23
135°	28	31	30	28	28	22
145°	31	33	33	30	31	19
155°	34	35	35	33	34	16
165°	37	37	38	37	37	10
175°	38	38	38	38	38	4
180°	38	38	38	38	38	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8
1°	5556.6	5556.6	5556.2	5555.8	5555.8	5555.1	5555.4	5555.8	5555.4	5555.8	5556.6
2°	5555.1	5555.3	5554.7	5553.8	5553.1	5552.8	5553.0	5553.1	5553.4	5553.9	5554.5
3°	5552.7	5552.6	5551.1	5550.5	5549.5	5548.9	5549.6	5549.6	5549.8	5549.6	5551.1
4°	5548.4	5548.2	5546.4	5545.5	5545.2	5543.8	5544.9	5544.2	5545.0	5544.4	5546.5
5°	5542.5	5542.4	5540.0	5539.4	5539.1	5537.2	5538.9	5537.9	5538.8	5537.7	5540.3
6°	5535.5	5535.5	5531.9	5531.5	5531.6	5529.1	5530.8	5529.8	5530.5	5530.0	5532.1
7°	5526.6	5526.0	5522.3	5521.9	5521.8	5519.1	5521.6	5520.7	5521.2	5519.7	5522.8
8°	5516.0	5515.6	5510.8	5510.6	5510.8	5508.2	5510.5	5509.3	5509.9	5508.6	5511.9
9°	5503.2	5502.8	5497.0	5497.4	5497.8	5494.8	5498.0	5496.3	5497.7	5495.3	5499.2
10°	5489.4	5488.7	5482.3	5482.4	5483.0	5480.5	5484.0	5482.1	5483.3	5481.0	5485.0
11°	5473.4	5472.0	5465.4	5465.6	5466.8	5464.2	5467.5	5466.1	5467.4	5464.7	5469.2
12°	5455.6	5454.2	5447.2	5447.6	5448.5	5445.9	5450.3	5448.5	5449.8	5447.1	5452.2
13°	5436.0	5434.6	5426.7	5427.7	5428.8	5426.5	5431.2	5428.7	5430.7	5428.3	5433.8
14°	5415.2	5413.1	5404.0	5405.6	5407.2	5404.8	5410.6	5407.5	5410.6	5407.4	5413.1
15°	5391.8	5389.5	5379.8	5381.7	5384.0	5381.7	5388.2	5385.4	5388.0	5384.8	5390.9
16°	5366.9	5363.6	5353.7	5355.7	5358.6	5357.0	5364.2	5360.7	5363.6	5360.6	5366.9
17°	5339.7	5336.3	5325.6	5328.2	5331.6	5330.4	5337.8	5334.0	5337.6	5334.5	5341.4
18°	5310.6	5307.5	5295.6	5298.1	5302.8	5301.3	5309.6	5305.8	5309.9	5306.5	5313.5
19°	5279.1	5276.4	5262.9	5266.5	5271.9	5271.1	5279.7	5275.2	5279.8	5276.9	5284.2
20°	5246.2	5242.9	5229.5	5233.1	5239.4	5238.7	5247.7	5243.1	5248.5	5244.9	5252.8
21°	5211.2	5207.6	5193.0	5197.3	5204.2	5203.8	5213.8	5208.9	5215.1	5211.7	5219.5
22°	5173.3	5169.9	5155.0	5159.8	5167.6	5167.1	5179.0	5173.2	5179.4	5176.1	5183.9
23°	5133.2	5129.9	5114.8	5119.7	5128.5	5128.4	5140.9	5134.8	5141.1	5138.2	5145.9
24°	5090.7	5088.5	5074.0	5078.0	5088.0	5088.1	5100.2	5094.6	5100.6	5097.7	5106.0
25°	5046.1	5043.7	5029.3	5034.3	5045.0	5044.8	5058.1	5051.5	5059.0	5054.7	5064.2
26°	4999.2	4998.0	4983.7	4989.6	4999.9	5000.1	5013.9	5006.8	5014.6	5010.7	5020.4
27°	4949.7	4949.7	4935.4	4942.0	4953.0	4953.5	4968.2	4960.0	4967.7	4962.9	4973.5
28°	4898.2	4898.3	4884.8	4891.2	4904.0	4904.4	4919.4	4910.8	4917.7	4912.9	4923.5
29°	4844.1	4846.3	4833.0	4840.6	4852.5	4853.6	4868.6	4860.0	4866.5	4860.7	4872.1
30°	4787.2	4791.1	4777.3	4785.4	4797.9	4799.0	4814.8	4805.4	4814.2	4806.8	4817.9
31°	4728.0	4732.8	4719.8	4729.4	4743.5	4742.8	4760.2	4749.2	4756.9	4749.8	4761.8
32°	4666.1	4671.4	4659.2	4669.4	4684.1	4683.9	4701.4	4689.8	4696.9	4689.1	4701.8
33°	4601.0	4608.4	4596.6	4607.8	4621.5	4621.9	4640.1	4626.8	4634.0	4627.1	4638.8
34°	4533.1	4541.7	4530.5	4543.8	4557.4	4557.2	4576.9	4562.9	4569.5	4561.4	4574.0
35°	4461.4	4471.6	4461.7	4475.6	4489.8	4488.8	4509.1	4494.7	4501.3	4492.6	4505.2
36°	4387.4	4401.0	4391.9	4406.6	4419.6	4417.1	4439.4	4424.1	4430.5	4421.5	4434.0
37°	4310.5	4325.5	4317.3	4334.0	4346.2	4343.2	4365.8	4349.4	4356.8	4346.5	4358.5
38°	4230.7	4247.0	4241.3	4258.3	4269.2	4265.8	4290.0	4272.4	4279.3	4267.9	4280.0
39°	4148.6	4166.8	4161.0	4180.8	4189.5	4186.2	4210.2	4192.5	4199.2	4187.7	4199.4
40°	4061.4	4081.4	4078.2	4097.8	4105.7	4102.8	4126.0	4107.4	4114.3	4102.2	4113.7
41°	3971.2	3994.2	3990.9	4012.5	4020.0	4017.9	4039.6	4019.9	4027.5	4015.9	4026.8
42°	3877.8	3904.1	3899.9	3923.0	3930.5	3928.2	3948.4	3927.5	3936.3	3923.5	3934.0
43°	3782.2	3810.1	3807.5	3830.4	3836.2	3835.5	3852.8	3832.2	3840.6	3829.4	3838.9
44°	3679.8	3709.4	3709.0	3732.7	3740.2	3739.4	3753.6	3733.4	3741.7	3730.3	3740.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	3575.4	3606.8	3606.9	3632.5	3638.7	3639.0	3650.8	3630.1	3638.5	3627.1	3635.9
46°	3466.6	3500.8	3502.0	3530.3	3534.5	3536.6	3545.1	3523.6	3532.2	3521.2	3529.2
47°	3353.5	3391.2	3392.9	3423.2	3425.3	3426.9	3434.9	3411.7	3419.8	3410.4	3417.2
48°	3236.8	3277.8	3280.3	3314.0	3316.1	3318.7	3324.4	3299.7	3307.0	3295.1	3303.1
49°	3116.9	3161.8	3164.4	3202.5	3202.7	3203.3	3206.5	3181.5	3188.7	3178.0	3184.6
50°	2995.7	3042.9	3046.9	3086.9	3087.0	3085.4	3088.9	3060.6	3064.8	3054.5	3061.6
51°	2868.0	2921.0	2925.6	2966.9	2967.9	2965.2	2967.1	2934.6	2939.4	2928.9	2934.9
52°	2739.4	2796.4	2800.0	2844.8	2843.8	2838.5	2842.1	2808.1	2807.6	2798.2	2806.3
53°	2608.8	2663.6	2672.0	2711.1	2718.3	2707.6	2714.5	2677.1	2672.4	2664.8	2671.1
54°	2473.4	2530.8	2540.9	2577.5	2581.4	2572.7	2577.8	2544.9	2537.3	2528.2	2536.0
55°	2338.4	2398.0	2404.3	2443.8	2444.4	2436.9	2441.2	2410.8	2402.0	2388.7	2400.6
56°	2198.6	2259.2	2261.8	2301.9	2307.3	2294.6	2305.7	2270.4	2262.0	2245.7	2259.2
57°	2056.8	2117.1	2117.7	2156.4	2161.3	2148.5	2159.9	2125.6	2120.6	2103.1	2118.3
58°	1911.5	1967.7	1962.0	2001.9	2009.5	1998.4	2008.6	1974.1	1977.2	1959.3	1975.3
59°	1756.9	1813.6	1800.5	1845.9	1852.4	1839.0	1846.9	1817.7	1828.8	1814.0	1828.1
60°	1602.1	1649.9	1635.0	1680.7	1691.8	1675.7	1684.4	1655.8	1673.7	1662.6	1679.8
61°	1439.8	1485.8	1466.6	1516.4	1528.1	1511.5	1516.1	1487.1	1515.4	1507.7	1525.6
62°	1282.2	1319.4	1302.4	1352.6	1361.8	1349.4	1353.8	1320.4	1347.8	1349.7	1369.7
63°	1141.0	1157.5	1142.4	1193.0	1202.4	1191.7	1198.9	1157.4	1182.0	1186.3	1214.6
64°	999.0	1007.7	1013.1	1047.0	1056.7	1060.9	1058.7	1022.3	1024.5	1046.4	1064.8
65°	857.0	873.2	884.3	912.8	928.0	930.3	929.5	887.4	880.6	906.6	927.0
66°	743.5	756.9	768.4	794.2	809.8	799.6	809.9	752.4	752.1	766.8	803.6
67°	636.8	650.4	658.7	684.3	701.2	693.2	701.1	644.5	641.3	658.0	696.6
68°	540.9	556.5	557.8	588.2	602.4	596.5	598.9	548.5	540.8	561.6	597.1
69°	460.2	474.2	473.5	503.5	521.1	511.0	511.9	463.4	454.7	480.5	511.6
70°	389.2	397.9	396.0	425.1	447.5	440.0	432.9	392.2	380.5	405.7	438.7
71°	337.7	343.2	332.7	362.9	379.3	368.1	364.2	335.9	322.0	343.2	377.4
72°	282.0	287.8	287.8	311.6	325.3	307.6	312.6	280.3	280.9	288.5	321.6
73°	251.3	249.2	252.2	265.7	284.8	259.8	271.2	231.5	239.9	243.6	279.5
74°	201.1	210.5	210.2	219.7	244.4	220.2	229.7	193.4	198.9	208.9	237.4
75°	173.9	172.0	178.4	174.3	204.0	183.8	188.7	163.2	163.9	180.4	195.5
76°	147.7	139.0	147.4	143.1	170.6	153.2	163.1	132.8	141.5	157.0	162.1
77°	128.2	115.0	123.8	121.8	145.0	129.0	137.5	116.0	122.5	130.5	135.6
78°	112.9	98.1	106.8	104.1	124.3	112.4	117.6	99.5	104.5	113.5	113.9
79°	97.6	85.3	90.0	89.7	106.6	96.0	100.9	83.0	89.9	96.7	98.3
80°	82.3	74.0	76.6	77.4	90.7	79.5	86.2	71.6	77.6	80.0	86.0
81°	70.1	63.8	64.7	66.0	76.4	67.3	73.2	62.0	66.7	68.6	75.0
82°	58.7	54.3	54.1	55.4	63.7	57.0	61.8	53.8	57.3	59.0	64.0
83°	47.7	45.2	45.2	45.9	51.7	47.2	51.2	45.6	48.8	49.9	54.0
84°	37.4	36.7	36.2	37.2	40.6	38.1	41.2	37.6	40.6	41.2	44.3
85°	30.0	30.3	29.9	30.8	31.2	31.0	32.3	31.6	33.1	33.3	35.3
86°	26.3	26.7	26.4	27.0	26.8	27.2	27.6	27.9	28.4	28.4	29.2
87°	23.2	23.6	23.0	23.8	24.0	24.1	24.9	25.1	25.6	25.4	26.0
88°	22.1	22.1	22.1	22.2	22.6	22.6	22.8	22.8	22.9	22.8	23.1
89°	21.4	21.6	21.5	21.7	22.1	22.1	22.3	22.2	22.3	22.3	22.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	21.2	21.2	21.2	21.2	21.7	21.7	21.7	21.7	21.7	21.7	21.7
91°	21.1	21.2	21.2	21.2	21.8	21.7	21.8	21.7	21.7	21.6	21.7
92°	21.1	21.2	21.2	21.2	21.8	21.8	21.8	21.7	21.7	21.7	21.7
93°	21.1	21.2	21.2	21.2	21.9	21.8	21.8	21.8	21.8	21.7	21.8
94°	21.1	21.2	21.2	21.2	22.0	21.9	21.9	21.8	21.8	21.8	21.8
95°	21.1	21.2	21.2	21.2	22.0	22.0	22.0	21.9	21.9	21.9	21.9
96°	21.1	21.2	21.2	21.2	22.1	22.0	22.1	22.0	22.0	22.0	22.0
97°	21.1	21.2	21.2	21.2	22.2	22.1	22.1	22.1	22.1	22.0	22.1
98°	21.1	21.2	21.2	21.2	22.3	22.2	22.2	22.2	22.2	22.1	22.2
99°	21.2	21.2	21.2	21.2	22.4	22.3	22.3	22.3	22.2	22.2	22.3
100°	21.2	21.3	21.2	21.3	22.5	22.4	22.4	22.4	22.4	22.3	22.4
101°	21.2	21.3	21.3	21.3	22.6	22.5	22.5	22.5	22.5	22.5	22.5
102°	21.3	21.5	21.4	21.4	22.7	22.7	22.7	22.6	22.6	22.6	22.6
103°	21.4	21.4	21.4	21.5	22.9	22.8	22.8	22.8	22.7	22.8	22.7
104°	21.5	21.5	21.5	21.6	23.0	22.9	23.0	22.9	22.9	22.9	22.9
105°	21.6	21.6	21.6	21.6	23.2	23.1	23.1	23.0	23.0	23.0	23.1
106°	21.7	21.7	21.7	21.8	23.5	23.3	23.3	23.2	23.2	23.2	23.2
107°	21.8	21.8	21.9	21.9	23.7	23.5	23.5	23.4	23.4	23.4	23.4
108°	21.9	22.0	22.0	22.0	23.9	23.7	23.7	23.6	23.6	23.6	23.6
109°	22.1	22.1	22.2	22.2	24.2	24.0	23.9	23.9	23.8	23.9	23.9
110°	22.2	22.3	22.3	22.4	24.4	24.2	24.2	24.1	24.0	24.1	24.1
111°	22.4	22.5	22.5	22.6	24.7	24.5	24.4	24.4	24.3	24.4	24.4
112°	22.6	22.7	22.7	22.8	25.0	24.8	24.7	24.6	24.5	24.6	24.6
113°	22.8	22.9	22.9	23.0	25.2	25.1	24.9	24.9	24.8	24.9	24.9
114°	23.1	23.1	23.2	23.2	25.5	25.4	25.2	25.2	25.0	25.2	25.2
115°	23.3	23.3	23.4	23.5	25.8	25.7	25.5	25.5	25.3	25.4	25.4
116°	23.5	23.6	23.7	23.7	26.0	25.9	25.8	25.8	25.6	25.7	25.8
117°	23.8	23.8	23.9	24.0	26.4	26.2	26.2	26.1	25.9	26.0	26.1
118°	24.0	24.0	24.2	24.2	26.6	26.5	26.5	26.4	26.1	26.4	26.4
119°	24.3	24.3	24.5	24.5	26.9	26.8	26.8	26.7	26.4	26.7	26.7
120°	24.6	24.6	24.8	24.8	27.2	27.0	27.1	27.0	26.7	27.0	27.0
121°	24.9	24.9	25.1	25.1	27.5	27.3	27.4	27.3	26.9	27.2	27.3
122°	25.1	25.1	25.4	25.4	27.8	27.6	27.6	27.6	27.2	27.5	27.6
123°	25.4	25.4	25.7	25.7	28.1	27.9	27.9	27.8	27.4	27.8	28.0
124°	25.7	25.7	26.0	26.0	28.4	28.2	28.2	28.1	27.7	28.1	28.3
125°	26.0	25.9	26.3	26.2	28.6	28.5	28.5	28.4	28.0	28.4	28.6
126°	26.3	26.2	26.6	26.5	28.9	28.8	28.8	28.7	28.2	28.7	28.8
127°	26.6	26.5	26.9	26.8	29.2	29.0	29.0	29.0	28.4	28.9	29.1
128°	26.9	26.8	27.1	27.0	29.4	29.3	29.3	29.2	28.6	29.2	29.3
129°	27.2	27.0	27.4	27.3	29.6	29.5	29.5	29.4	28.9	29.4	29.6
130°	27.4	27.3	27.7	27.6	29.8	29.8	29.8	29.7	29.1	29.7	29.8
131°	27.6	27.5	27.9	27.8	30.0	30.0	30.0	30.0	29.3	30.0	30.1
132°	27.9	27.8	28.2	28.1	30.3	30.3	30.3	30.2	29.6	30.2	30.3
133°	28.1	28.0	28.4	28.3	30.6	30.5	30.5	30.4	29.9	30.4	30.6
134°	28.3	28.3	28.7	28.5	30.9	30.7	30.7	30.6	30.1	30.6	30.8



TEST NUMBER: P295272

CATALOG NUMBER: UHB-12-UNV-L840-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	28.5	28.5	28.9	28.8	31.1	30.9	31.0	30.8	30.3	30.8	31.0
136°	28.7	28.7	29.1	29.0	31.4	31.1	31.2	31.0	30.5	31.0	31.3
137°	28.9	29.0	29.3	29.2	31.6	31.3	31.3	31.2	30.7	31.2	31.5
138°	29.1	29.2	29.5	29.4	31.8	31.5	31.5	31.5	31.0	31.5	31.7
139°	29.4	29.5	29.7	29.6	31.9	31.8	31.7	31.7	31.2	31.7	31.9
140°	29.6	29.7	29.8	29.8	32.1	32.0	31.9	31.8	31.5	31.9	32.1
141°	29.8	29.8	30.0	30.0	32.3	32.2	32.1	32.0	31.7	32.1	32.4
142°	30.0	30.0	30.2	30.1	32.6	32.4	32.3	32.3	32.0	32.3	32.6
143°	30.2	30.2	30.4	30.2	32.9	32.6	32.4	32.5	32.2	32.6	32.9
144°	30.4	30.3	30.6	30.4	33.1	32.8	32.7	32.7	32.5	32.8	33.1
145°	30.7	30.5	30.9	30.7	33.3	33.0	32.9	32.9	32.7	33.1	33.4
146°	30.9	30.8	31.1	31.0	33.5	33.3	33.2	33.2	32.9	33.4	33.7
147°	31.2	31.0	31.4	31.3	33.7	33.6	33.4	33.4	33.1	33.8	33.9
148°	31.4	31.3	31.7	31.6	33.8	33.9	33.7	33.6	33.3	34.1	34.3
149°	31.7	31.6	31.9	31.8	34.0	34.1	34.0	34.0	33.5	34.4	34.6
150°	32.0	31.9	32.3	32.0	34.2	34.4	34.3	34.3	33.7	34.7	34.9
151°	32.2	32.1	32.6	32.2	34.4	34.6	34.6	34.5	33.9	34.9	35.2
152°	32.5	32.5	32.8	32.4	34.6	34.9	34.9	34.8	34.2	35.2	35.5
153°	32.9	32.8	33.0	32.7	34.7	35.2	35.2	35.1	34.5	35.4	35.8
154°	33.2	33.1	33.3	33.0	35.0	35.6	35.4	35.4	34.8	35.7	36.1
155°	33.6	33.5	33.5	33.4	35.2	35.8	35.7	35.6	35.1	35.9	36.3
156°	34.0	33.9	33.8	33.8	35.5	36.0	35.9	35.9	35.4	36.1	36.5
157°	34.3	34.3	34.2	34.2	35.7	36.2	36.2	36.1	35.7	36.3	36.8
158°	34.7	34.6	34.5	34.6	35.9	36.4	36.5	36.4	36.0	36.5	37.0
159°	35.0	34.9	34.8	35.0	36.2	36.7	36.7	36.6	36.3	36.6	37.2
160°	35.4	35.2	35.1	35.3	36.4	36.9	37.0	36.9	36.5	36.9	37.4
161°	35.7	35.6	35.4	35.7	36.7	37.1	37.2	37.1	36.8	37.1	37.6
162°	36.1	35.8	35.7	36.0	36.9	37.2	37.5	37.3	37.0	37.3	37.9
163°	36.4	36.0	35.9	36.3	37.1	37.3	37.7	37.5	37.2	37.4	38.1
164°	36.7	36.2	36.2	36.6	37.2	37.4	37.8	37.7	37.4	37.6	38.2
165°	37.0	36.4	36.5	36.8	37.4	37.5	38.0	37.8	37.6	37.7	38.4
166°	37.3	36.6	36.8	37.1	37.6	37.7	38.2	38.0	37.8	37.8	38.5
167°	37.5	36.8	37.0	37.4	37.7	37.7	38.2	38.0	37.9	37.8	38.5
168°	37.6	36.9	37.2	37.6	37.6	37.7	38.1	38.0	37.8	37.8	38.3
169°	37.7	37.1	37.3	37.7	37.6	37.7	38.0	38.0	37.8	37.8	38.1
170°	37.8	37.2	37.4	37.9	37.6	37.7	37.9	37.9	37.7	37.7	37.8
171°	37.8	37.3	37.5	37.9	37.5	37.5	37.8	37.8	37.5	37.5	37.7
172°	37.9	37.4	37.6	38.0	37.5	37.4	37.7	37.7	37.4	37.4	37.6
173°	38.0	37.5	37.7	38.1	37.4	37.3	37.6	37.5	37.3	37.2	37.5
174°	38.1	37.6	37.9	38.2	37.6	37.3	37.7	37.5	37.4	37.2	37.6
175°	38.2	37.7	37.9	38.2	37.6	37.3	37.8	37.6	37.5	37.3	37.7
176°	38.2	37.8	37.9	38.2	37.8	37.4	37.8	37.7	37.5	37.3	37.7
177°	38.2	37.8	37.9	38.1	37.8	37.5	37.8	37.7	37.6	37.3	37.7
178°	38.1	37.7	37.9	38.0	37.9	37.5	37.9	37.8	37.7	37.3	37.7
179°	38.0	37.6	37.8	37.9	38.0	37.6	38.0	37.8	37.8	37.4	37.7



TEST NUMBER: P295272

CATALOG NUMBER: UHB-12-UNV-L840-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8



TEST NUMBER: P295272

CATALOG NUMBER: UHB-12-UNV-L840-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	5543.8	5543.8	5543.8	5543.8	5543.8	5543.8
1°	5556.2	5556.6	5556.6	5556.6	5557.0	5556.6
2°	5554.6	5555.1	5555.8	5555.5	5556.1	5555.1
3°	5550.8	5552.0	5553.4	5553.2	5553.4	5552.7
4°	5546.0	5547.8	5549.4	5549.3	5549.8	5548.4
5°	5540.1	5542.3	5544.1	5543.8	5544.8	5542.5
6°	5532.3	5535.4	5537.3	5536.9	5538.0	5535.5
7°	5523.0	5526.6	5529.3	5528.2	5529.7	5526.6
8°	5511.9	5515.8	5519.4	5518.0	5519.7	5516.0
9°	5499.9	5504.0	5507.6	5506.4	5508.1	5503.2
10°	5485.9	5490.4	5494.8	5492.8	5495.2	5489.4
11°	5470.3	5475.0	5479.9	5477.5	5479.6	5473.4
12°	5453.2	5458.1	5462.7	5460.3	5462.7	5455.6
13°	5434.4	5439.1	5444.6	5441.8	5444.0	5436.0
14°	5413.6	5419.0	5424.6	5421.4	5423.4	5415.2
15°	5391.2	5396.7	5402.1	5399.4	5401.1	5391.8
16°	5366.7	5373.0	5378.8	5375.0	5376.7	5366.9
17°	5340.4	5346.7	5353.7	5349.6	5350.6	5339.7
18°	5312.2	5319.3	5325.8	5321.2	5322.2	5310.6
19°	5282.8	5289.2	5296.0	5291.0	5292.2	5279.1
20°	5250.8	5257.6	5264.4	5259.1	5259.9	5246.2
21°	5216.6	5224.0	5231.0	5225.1	5225.7	5211.2
22°	5180.4	5187.7	5195.4	5188.4	5188.9	5173.3
23°	5142.2	5149.7	5157.5	5150.0	5149.4	5133.2
24°	5101.2	5110.0	5117.3	5108.8	5108.3	5090.7
25°	5058.8	5066.6	5074.0	5064.5	5064.1	5046.1
26°	5014.2	5022.0	5029.6	5018.7	5018.4	4999.2
27°	4966.1	4973.5	4981.3	4969.9	4969.6	4949.7
28°	4915.8	4923.8	4931.3	4919.0	4918.4	4898.2
29°	4862.8	4870.9	4878.8	4864.8	4864.2	4844.1
30°	4808.3	4814.8	4822.1	4807.9	4807.1	4787.2
31°	4750.4	4756.2	4765.4	4749.8	4748.8	4728.0
32°	4688.8	4695.4	4702.6	4686.2	4685.4	4666.1
33°	4625.5	4631.7	4638.9	4621.0	4620.2	4601.0
34°	4558.2	4564.7	4571.0	4553.9	4552.8	4533.1
35°	4488.4	4494.0	4500.6	4483.1	4482.1	4461.4
36°	4416.4	4420.4	4427.1	4409.2	4408.8	4387.4
37°	4339.7	4343.6	4351.0	4331.4	4331.3	4310.5
38°	4259.8	4264.0	4271.2	4251.8	4251.4	4230.7
39°	4178.0	4180.1	4188.6	4169.1	4169.6	4148.6
40°	4091.2	4094.5	4102.3	4083.0	4082.4	4061.4
41°	4003.0	4003.8	4013.3	3992.2	3994.1	3971.2
42°	3909.1	3911.4	3920.6	3897.3	3899.3	3877.8
43°	3812.0	3814.5	3823.8	3800.1	3802.6	3782.2
44°	3713.8	3713.4	3722.4	3698.0	3701.6	3679.8



TEST NUMBER: P295272

CATALOG NUMBER: UHB-12-UNV-L840-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	3608.9	3608.1	3618.0	3593.3	3596.9	3575.4
46°	3502.6	3499.0	3509.7	3483.2	3489.1	3466.6
47°	3391.4	3385.5	3395.3	3372.2	3377.1	3353.5
48°	3276.7	3265.7	3279.4	3255.3	3260.8	3236.8
49°	3157.1	3141.0	3156.7	3135.5	3142.7	3116.9
50°	3031.8	3012.4	3030.2	3012.9	3021.0	2995.7
51°	2902.5	2879.5	2899.4	2885.2	2896.7	2868.0
52°	2768.0	2746.1	2766.6	2752.9	2769.2	2739.4
53°	2630.4	2612.4	2629.6	2620.3	2634.7	2608.8
54°	2491.8	2477.3	2492.5	2484.1	2500.2	2473.4
55°	2356.4	2344.6	2355.4	2347.9	2365.7	2338.4
56°	2217.4	2208.6	2217.2	2210.9	2227.6	2198.6
57°	2076.9	2070.1	2078.7	2072.0	2087.0	2056.8
58°	1936.8	1927.3	1936.2	1928.4	1944.0	1911.5
59°	1793.1	1783.2	1793.0	1779.8	1796.2	1756.9
60°	1649.0	1637.7	1643.7	1627.0	1643.9	1602.1
61°	1500.3	1487.1	1491.2	1468.2	1485.1	1439.8
62°	1351.0	1334.4	1338.0	1306.9	1324.5	1282.2
63°	1199.6	1178.5	1181.3	1149.6	1163.2	1141.0
64°	1059.5	1038.8	1032.1	1019.5	1013.5	999.0
65°	919.8	899.7	889.3	889.9	878.9	857.0
66°	780.1	760.5	762.3	760.3	761.8	743.5
67°	665.9	649.5	650.6	655.2	656.8	636.8
68°	564.3	551.1	551.4	560.2	564.9	540.9
69°	480.6	462.8	468.1	476.6	487.3	460.2
70°	410.6	391.2	400.1	401.8	420.3	389.2
71°	350.3	327.8	344.0	341.8	355.2	337.7
72°	304.3	273.6	291.2	291.2	300.8	282.0
73°	261.9	228.8	252.5	236.5	259.2	251.3
74°	219.3	190.0	213.7	202.0	217.6	201.1
75°	174.0	161.2	175.0	172.6	176.0	173.9
76°	141.4	136.2	147.9	150.2	153.0	147.7
77°	123.1	119.4	127.5	128.9	128.6	128.2
78°	105.0	102.8	107.3	112.8	109.3	112.9
79°	86.9	86.2	91.5	96.9	93.8	97.6
80°	75.1	74.2	78.2	80.9	80.7	82.3
81°	65.5	64.3	67.8	68.9	69.2	70.1
82°	56.5	55.4	58.1	58.3	59.0	58.7
83°	48.1	47.2	48.6	48.5	48.9	47.7
84°	40.0	39.4	39.8	39.0	38.9	37.4
85°	33.1	32.3	32.6	31.1	31.3	30.0
86°	28.5	27.6	27.8	27.2	27.1	26.3
87°	25.7	24.9	25.1	24.2	24.1	23.2
88°	23.0	22.6	22.6	22.3	22.2	22.1
89°	22.3	21.8	21.9	21.7	21.7	21.4



TEST NUMBER: P295272

CATALOG NUMBER: UHB-12-UNV-L840-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	21.7	21.2	21.3	21.2	21.2	21.2
91°	21.7	21.2	21.2	21.2	21.2	21.1
92°	21.7	21.2	21.2	21.2	21.1	21.1
93°	21.8	21.2	21.2	21.2	21.1	21.1
94°	21.8	21.2	21.2	21.2	21.1	21.1
95°	21.9	21.2	21.2	21.2	21.2	21.1
96°	22.0	21.2	21.2	21.2	21.2	21.1
97°	22.1	21.2	21.2	21.2	21.2	21.1
98°	22.2	21.2	21.3	21.2	21.2	21.1
99°	22.3	21.2	21.3	21.2	21.2	21.2
100°	22.4	21.3	21.3	21.3	21.3	21.2
101°	22.5	21.4	21.4	21.3	21.3	21.2
102°	22.7	21.4	21.4	21.4	21.4	21.3
103°	22.8	21.5	21.5	21.4	21.5	21.4
104°	23.0	21.6	21.6	21.5	21.5	21.5
105°	23.1	21.8	21.7	21.6	21.6	21.6
106°	23.3	22.1	21.8	21.8	21.7	21.7
107°	23.5	22.3	22.0	21.9	21.8	21.8
108°	23.7	22.4	22.1	22.0	22.0	21.9
109°	24.0	22.6	22.2	22.2	22.2	22.1
110°	24.2	22.7	22.4	22.4	22.3	22.2
111°	24.4	22.9	22.7	22.6	22.5	22.4
112°	24.7	23.1	22.9	22.8	22.7	22.6
113°	25.0	23.4	23.2	23.0	22.9	22.8
114°	25.3	23.6	23.4	23.2	23.1	23.1
115°	25.6	23.8	23.7	23.4	23.4	23.3
116°	25.8	24.1	23.9	23.7	23.6	23.5
117°	26.1	24.3	24.1	24.0	23.9	23.8
118°	26.5	24.5	24.3	24.2	24.1	24.0
119°	26.8	24.7	24.6	24.5	24.4	24.3
120°	27.1	25.0	24.9	24.8	24.7	24.6
121°	27.4	25.3	25.2	25.1	25.0	24.9
122°	27.7	25.5	25.4	25.4	25.2	25.1
123°	28.0	25.8	25.7	25.7	25.5	25.4
124°	28.3	26.0	26.0	26.0	25.8	25.7
125°	28.7	26.3	26.3	26.3	26.1	26.0
126°	28.9	26.6	26.6	26.6	26.4	26.3
127°	29.2	26.8	26.8	26.9	26.7	26.6
128°	29.4	27.0	27.1	27.2	27.0	26.9
129°	29.7	27.3	27.4	27.4	27.2	27.2
130°	30.0	27.5	27.6	27.7	27.5	27.4
131°	30.3	27.7	27.8	27.9	27.7	27.6
132°	30.5	27.9	28.1	28.2	28.0	27.9
133°	30.8	28.1	28.3	28.4	28.2	28.1
134°	31.0	28.3	28.5	28.7	28.4	28.3



TEST NUMBER: P295272

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	31.2	28.5	28.7	29.0	28.6	28.5
136°	31.4	28.7	29.0	29.2	28.8	28.7
137°	31.6	28.9	29.2	29.3	29.1	28.9
138°	31.8	29.1	29.4	29.5	29.2	29.1
139°	32.0	29.3	29.6	29.8	29.4	29.4
140°	32.3	29.5	29.8	30.0	29.6	29.6
141°	32.5	29.7	30.0	30.2	29.8	29.8
142°	32.7	29.8	30.2	30.4	29.9	30.0
143°	32.9	30.0	30.4	30.5	30.1	30.2
144°	33.2	30.3	30.6	30.7	30.2	30.4
145°	33.6	30.5	30.9	31.0	30.4	30.7
146°	33.9	30.7	31.2	31.2	30.7	30.9
147°	34.2	30.9	31.4	31.5	31.0	31.2
148°	34.4	31.1	31.6	31.8	31.3	31.4
149°	34.6	31.3	31.8	32.0	31.6	31.7
150°	34.9	31.6	32.1	32.4	31.9	32.0
151°	35.1	31.8	32.3	32.7	32.2	32.2
152°	35.3	32.1	32.5	33.0	32.5	32.5
153°	35.6	32.4	32.7	33.2	32.8	32.9
154°	35.8	32.7	33.0	33.4	33.2	33.2
155°	36.1	33.1	33.3	33.6	33.6	33.6
156°	36.3	33.4	33.7	33.8	34.0	34.0
157°	36.6	33.8	34.1	34.2	34.4	34.3
158°	36.8	34.2	34.4	34.5	34.8	34.7
159°	37.0	34.5	34.8	34.8	35.2	35.0
160°	37.2	34.9	35.1	35.2	35.6	35.4
161°	37.3	35.3	35.4	35.5	35.9	35.7
162°	37.5	35.7	35.7	35.8	36.3	36.1
163°	37.7	36.0	36.0	36.1	36.6	36.4
164°	37.8	36.4	36.3	36.4	36.9	36.7
165°	38.0	36.8	36.5	36.7	37.2	37.0
166°	38.1	37.1	36.8	37.0	37.5	37.3
167°	38.1	37.3	37.0	37.3	37.7	37.5
168°	38.1	37.5	37.2	37.4	37.9	37.6
169°	38.0	37.7	37.4	37.5	38.1	37.7
170°	38.0	37.8	37.5	37.6	38.3	37.8
171°	37.9	37.9	37.6	37.8	38.4	37.8
172°	37.8	38.0	37.6	37.9	38.5	37.9
173°	37.6	38.1	37.7	38.0	38.6	38.0
174°	37.6	38.2	37.8	38.1	38.7	38.1
175°	37.6	38.2	37.9	38.2	38.7	38.2
176°	37.6	38.3	38.0	38.3	38.7	38.2
177°	37.6	38.3	38.0	38.3	38.6	38.2
178°	37.5	38.3	37.9	38.2	38.4	38.1
179°	37.5	38.2	37.9	38.2	38.3	38.0



TEST NUMBER: P295272

CATALOG NUMBER: UHB-12-UNV-L840-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	37.8	37.8	37.8	37.8	37.8	37.8

(END OF REPORT)