

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: STREETWORKS

Report Number: P258182

Luminaire Tested: **ARCH-M-AF48-90-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-90-D-U-T2U-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8285.1 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 92
Input Voltage (V): NR
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: 28.75 FT

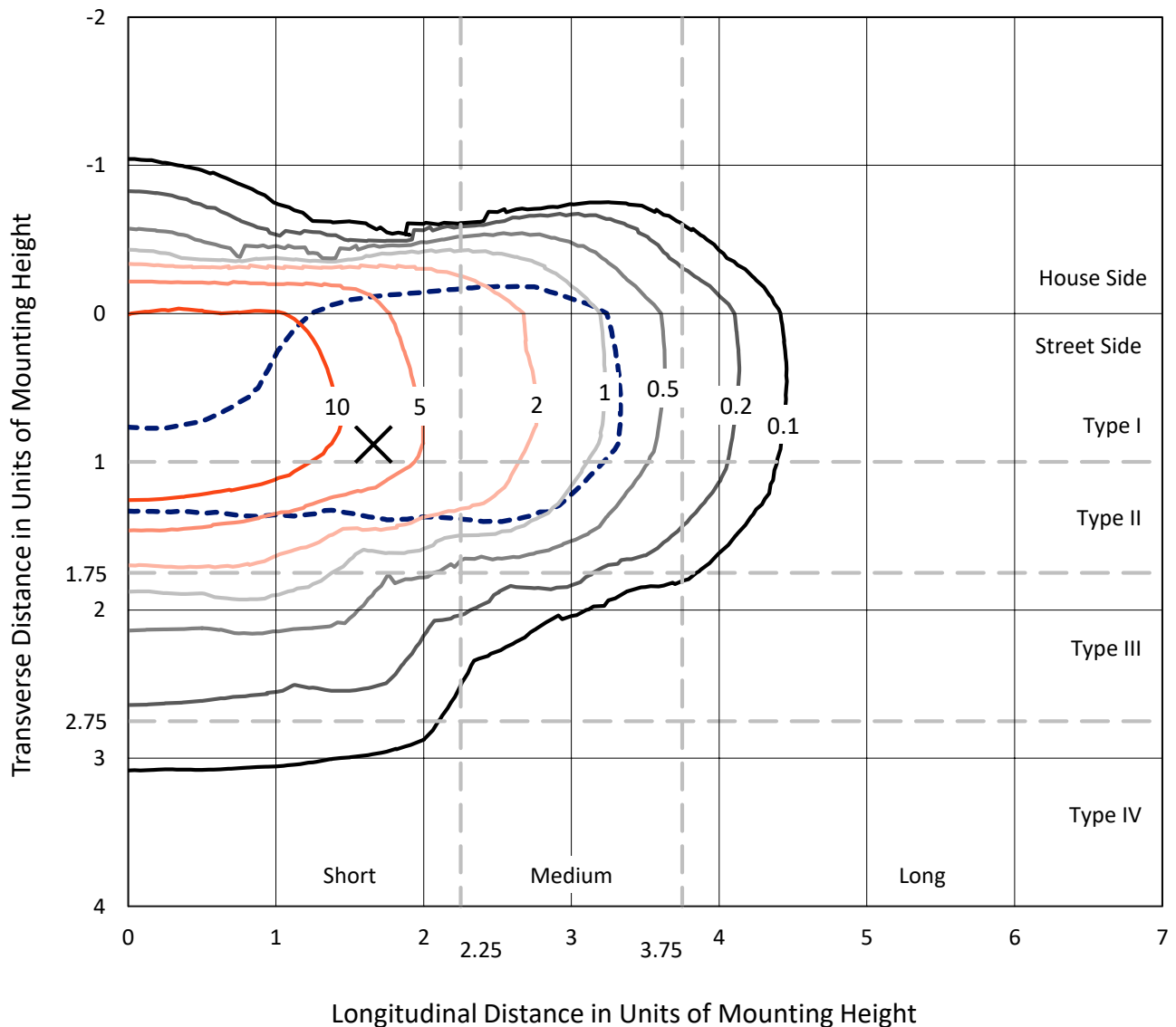


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

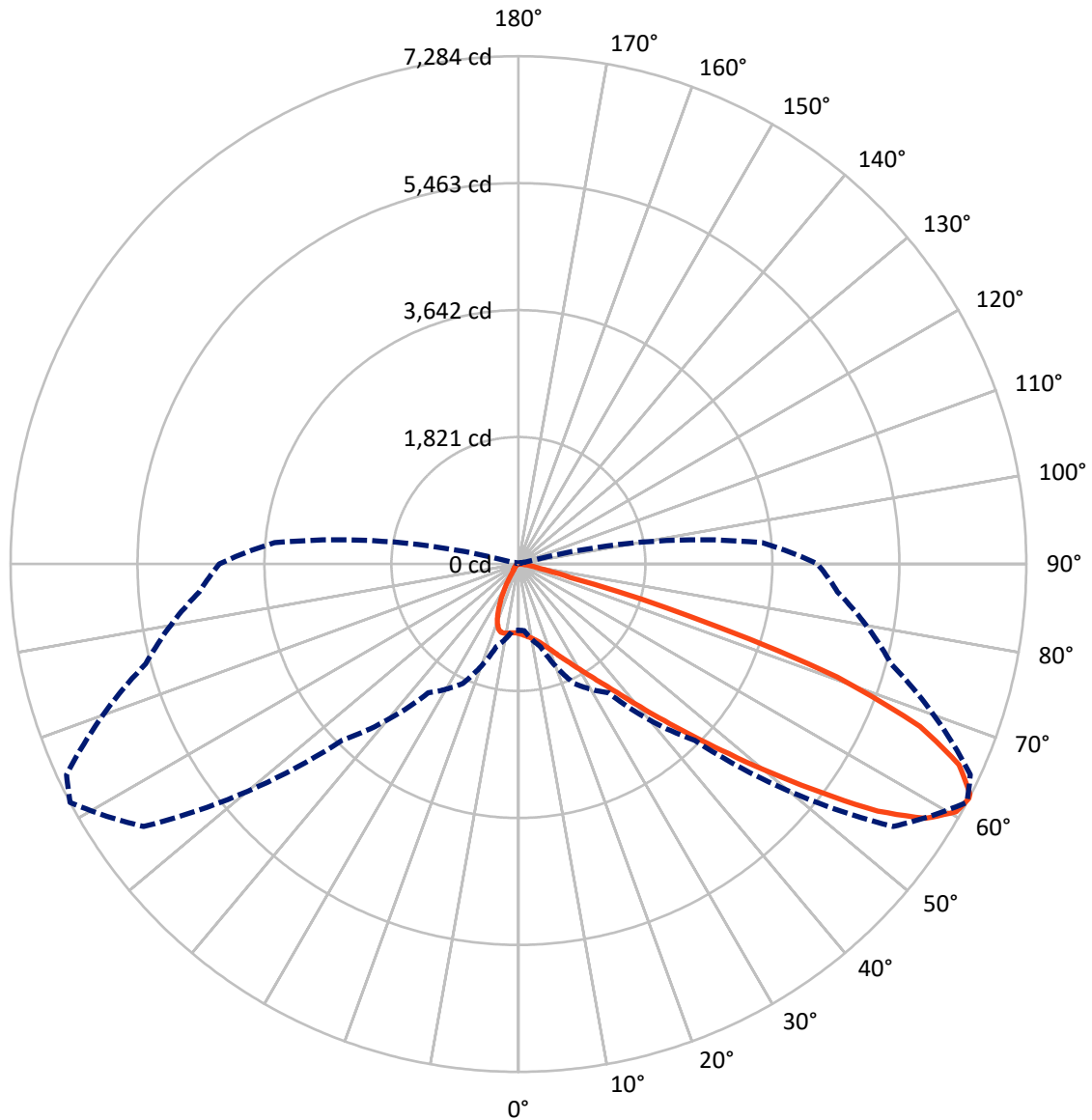


Based on 10 foot mounting height. Maximum calculated value = 19.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical



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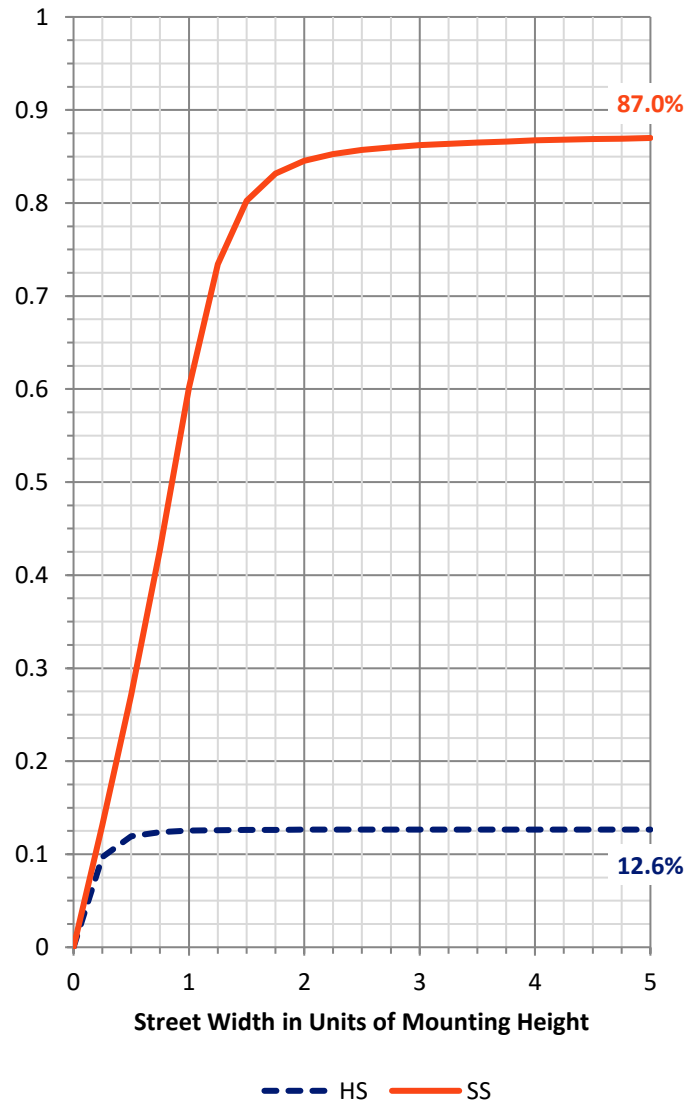
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1059.4	0.0	1059.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7225.8	0.0	7225.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	8285.1	0.0	8285.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.0	1.2
10°-20°	268.2	3.2
20°-30°	450.5	5.4
30°-40°	863.5	10.4
40°-50°	1763.7	21.3
50°-60°	2334.0	28.2
60°-70°	1813.1	21.9
70°-80°	654.4	7.9
80°-90°	41.7	0.5
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°-90°	8285.1	100.0
0°-180°	8285.1	100.0



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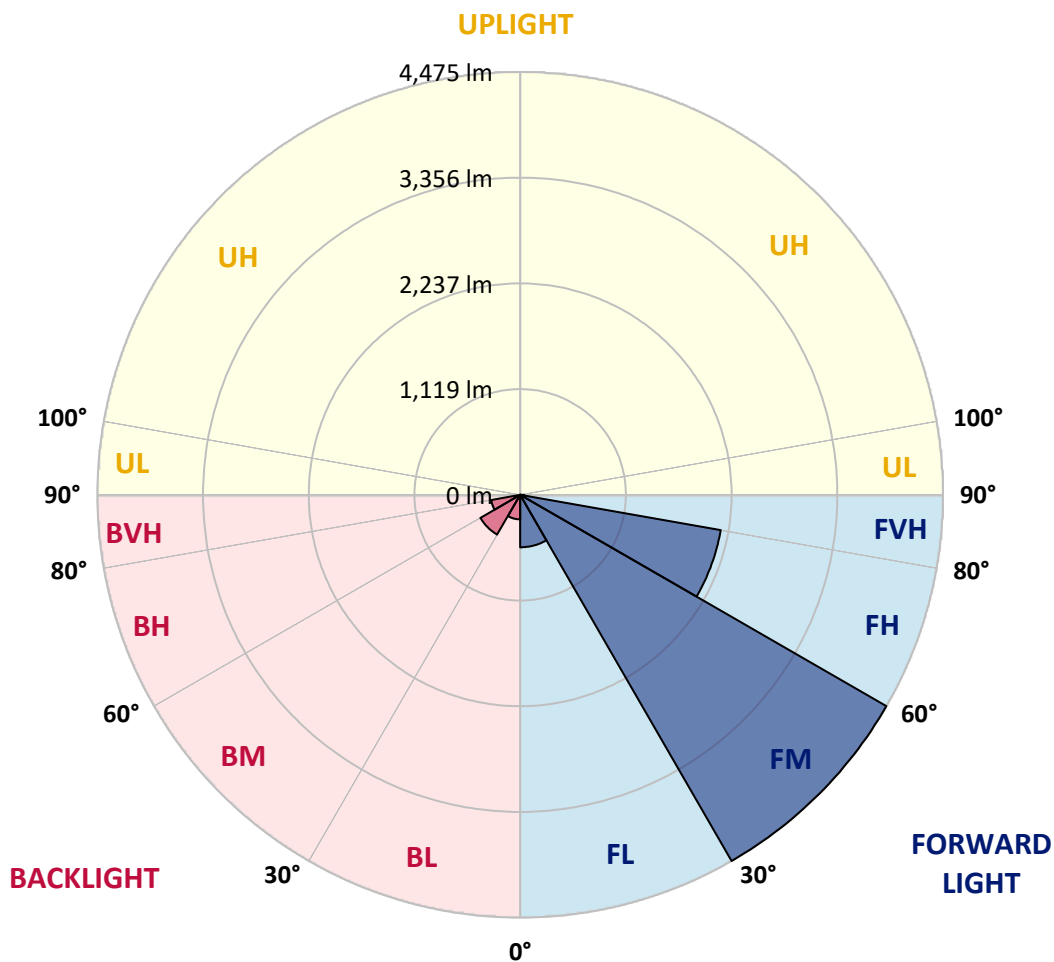
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	555.4	6.7			
FM	(30°-60°)	4474.8	54.0			
FH	(60°-80°)	2155.6	26.0			G2/5000
FVH	(80°-90°)	39.9	0.5			G1/100
BL	(0°-30°)	259.3	3.1	B1/500		
BM	(30°-60°)	486.3	5.9	B1/1000		
BH	(60°-80°)	311.9	3.8	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1
2.5°	1024.6	1022.4	1020.5	1018.4	1018.4	1016.3	1014.4	1010.3	1006.2	1002.1	1000.0
5°	1042.9	1040.8	1038.8	1040.8	1038.8	1038.8	1036.8	1032.7	1028.5	1022.4	1016.3
7.5°	1057.1	1055.1	1053.0	1055.1	1057.1	1059.2	1061.2	1057.1	1055.1	1046.9	1040.8
10°	1075.4	1073.4	1071.4	1075.4	1075.4	1085.6	1087.6	1085.6	1083.7	1077.6	1067.4
12.5°	1101.9	1103.9	1103.9	1108.0	1112.1	1124.4	1128.4	1122.3	1122.3	1114.1	1101.9
15°	1150.8	1150.8	1150.8	1154.9	1156.9	1173.2	1177.3	1171.1	1175.3	1161.0	1148.8
17.5°	1197.7	1199.6	1203.8	1211.9	1211.9	1226.2	1234.3	1234.3	1242.5	1224.1	1207.9
20°	1244.5	1246.5	1252.6	1271.0	1271.0	1289.4	1303.6	1309.7	1317.8	1299.5	1271.0
22.5°	1295.4	1295.4	1305.6	1334.2	1328.0	1364.6	1391.2	1401.4	1409.5	1385.1	1340.3
25°	1372.9	1364.6	1372.9	1399.3	1395.2	1446.1	1495.0	1505.3	1515.4	1486.9	1419.8
27.5°	1519.5	1507.2	1478.8	1480.8	1480.8	1539.9	1609.1	1623.4	1629.5	1605.0	1521.6
30°	1812.8	1812.8	1706.8	1635.6	1588.7	1641.7	1739.4	1763.9	1772.0	1735.4	1625.4
32.5°	2324.1	2324.1	2128.5	1947.2	1770.0	1770.0	1882.0	1926.9	1935.0	1892.3	1763.9
35°	2975.7	2971.8	2678.5	2429.9	2083.7	1953.3	2049.0	2124.4	2148.9	2091.9	1943.1
37.5°	3668.4	3641.8	3326.2	3041.0	2566.4	2246.6	2275.1	2375.0	2397.3	2350.5	2175.4
40°	4230.5	4199.9	3945.4	3707.0	3189.8	2715.1	2601.0	2692.7	2719.1	2654.0	2452.4
42.5°	4739.7	4664.4	4489.3	4318.2	3906.7	3525.8	3034.9	3071.6	3100.1	3030.9	2764.0
45°	5108.4	4992.3	4902.7	4849.7	4631.8	4415.8	3597.1	3523.7	3533.9	3448.3	3104.2
47.5°	5118.6	5037.1	5045.3	5183.8	5273.4	5265.2	4328.3	4067.6	4028.8	3886.3	3466.7
50°	4629.8	4676.7	4825.3	5220.4	5705.2	5998.5	5198.0	4711.3	4595.1	4338.4	3827.3
52.5°	3815.0	3888.3	4167.3	4833.4	5768.4	6481.3	6100.4	5446.5	5238.8	4786.5	4104.3
55°	2988.0	2992.1	3285.4	3963.7	5346.7	6568.7	6821.4	6255.1	5937.3	5126.8	4287.6
57.5°	2055.1	2167.1	2540.0	2996.2	4395.5	6132.9	7092.2	6882.5	6473.1	5336.6	4415.8
60°	1346.4	1352.4	1786.3	2313.9	2992.1	4990.3	6927.2	7214.5	6907.0	5460.8	4503.4
62°	949.1	959.4	1228.2	1890.1	2254.8	3576.7	6562.6	7283.8	7151.3	5534.1	4595.1
62.5°	879.9	888.1	1114.1	1784.3	2118.3	3208.1	6432.3	7267.5	7188.0	5558.6	4627.6
65°	645.7	645.7	729.2	1226.2	1552.0	1733.4	5450.6	6943.5	7139.1	5754.0	4749.9
67.5°	499.0	503.1	531.6	755.6	1171.1	1051.0	3479.0	6214.4	6630.0	6043.3	4819.2
70°	429.8	427.7	448.1	501.1	845.3	698.6	1531.7	4849.7	5552.4	5969.9	4756.0
72.5°	317.7	319.8	366.7	440.0	588.7	454.2	692.4	2574.5	3601.1	4672.5	4075.7
75°	203.7	205.7	258.7	346.3	423.7	297.4	399.3	767.9	1474.7	2590.9	2493.1
77.5°	136.5	140.5	169.1	242.3	370.7	185.3	250.5	321.8	444.0	971.6	894.2
80°	91.7	91.7	107.9	162.9	234.3	154.8	134.4	213.8	230.2	301.4	150.8
82.5°	61.0	61.0	71.2	107.9	152.8	138.5	81.5	116.2	134.4	150.8	53.0
85°	36.7	36.7	48.8	67.2	99.8	77.3	53.0	65.2	69.3	95.7	28.5
87.5°	22.4	20.3	32.6	46.9	53.0	46.9	34.6	34.6	36.7	53.0	14.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1
2.5°	996.0	993.9	992.0	987.9	981.8	977.7	973.6	969.5	965.5	965.5	971.6
5°	1014.4	1008.3	1000.0	992.0	979.7	971.6	965.5	957.3	953.3	953.3	955.3
7.5°	1036.8	1030.7	1016.3	1002.1	983.8	969.5	955.3	936.9	922.7	916.5	922.7
10°	1061.2	1053.0	1032.7	1010.3	989.9	953.3	906.5	849.4	800.5	778.0	788.3
12.5°	1091.7	1081.5	1057.1	1026.6	979.7	890.1	774.0	641.6	558.1	519.4	527.5
15°	1136.6	1122.3	1087.6	1040.8	936.9	743.4	554.1	401.3	323.9	291.2	295.3
17.5°	1189.5	1171.1	1124.4	1036.8	827.0	535.7	330.0	234.3	201.7	193.5	193.5
20°	1246.5	1222.1	1161.0	1006.2	659.9	336.1	205.7	179.3	167.0	160.9	160.9
22.5°	1305.6	1273.0	1191.6	934.9	470.5	209.8	169.1	150.8	136.5	130.3	130.3
25°	1376.8	1334.2	1222.1	810.7	299.4	169.1	144.7	126.3	112.0	103.9	105.9
27.5°	1460.5	1405.4	1248.7	655.9	193.5	146.6	120.1	101.8	89.6	85.5	85.5
30°	1547.9	1482.8	1254.8	490.9	156.8	126.3	99.8	83.5	75.4	71.2	71.2
32.5°	1668.2	1582.6	1236.4	325.9	132.4	105.9	83.5	69.3	63.2	61.0	61.0
35°	1827.1	1712.9	1193.5	201.7	112.0	87.6	69.3	61.0	54.9	53.0	53.0
37.5°	2028.7	1894.2	1118.3	138.5	95.7	71.2	59.1	53.0	48.8	46.9	46.9
40°	2297.5	2114.2	1020.5	120.1	81.5	61.0	51.0	46.9	42.7	42.7	42.7
42.5°	2582.7	2381.1	894.2	105.9	69.3	53.0	44.8	40.8	38.7	36.7	36.7
45°	2894.4	2654.0	737.4	93.8	59.1	46.9	40.8	34.6	32.6	32.6	32.6
47.5°	3203.9	2935.1	566.3	81.5	51.0	40.8	34.6	30.6	28.5	26.4	26.4
50°	3521.7	3189.8	415.5	71.2	44.8	36.7	30.6	26.4	22.4	20.3	20.3
52.5°	3751.9	3342.5	303.5	61.0	38.7	30.6	24.5	20.3	16.3	14.2	14.2
55°	3920.9	3436.2	222.1	51.0	34.6	26.4	20.3	16.3	12.2	12.2	10.2
57.5°	4053.3	3481.0	167.0	44.8	30.6	22.4	16.3	12.2	10.2	8.2	8.2
60°	4155.1	3482.9	124.2	36.7	26.4	18.3	12.2	8.2	6.1	6.1	6.1
62°	4289.6	3509.5	101.8	30.6	24.5	16.3	10.2	6.1	4.1	2.0	2.0
62.5°	4328.3	3519.7	97.8	30.6	22.4	14.2	8.2	6.1	4.1	2.0	2.0
65°	4507.5	3538.1	75.4	24.5	18.3	12.2	6.1	4.1	0.0	0.0	0.0
67.5°	4670.5	3509.5	54.9	18.3	14.2	8.2	6.1	2.0	0.0	0.0	0.0
70°	4654.2	3314.0	38.7	12.2	10.2	6.1	4.1	0.0	0.0	0.0	0.0
72.5°	3835.3	2480.8	26.4	10.2	6.1	4.1	2.0	0.0	0.0	0.0	0.0
75°	2315.9	1085.6	18.3	6.1	6.1	4.1	2.0	0.0	0.0	0.0	0.0
77.5°	759.8	393.2	12.2	4.1	4.1	2.0	2.0	0.0	0.0	0.0	0.0
80°	124.2	65.2	6.1	4.1	4.1	2.0	2.0	0.0	0.0	0.0	0.0
82.5°	38.7	16.3	4.1	4.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0
85°	14.2	6.1	4.1	4.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.1	4.1	4.1	4.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)