

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: P231341

Luminaire Tested: **ARCH-M-AF48-100-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231341
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-100-D-U-T4W-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 660mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8754 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 101
Input Voltage (V): NR
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: 28.75 FT

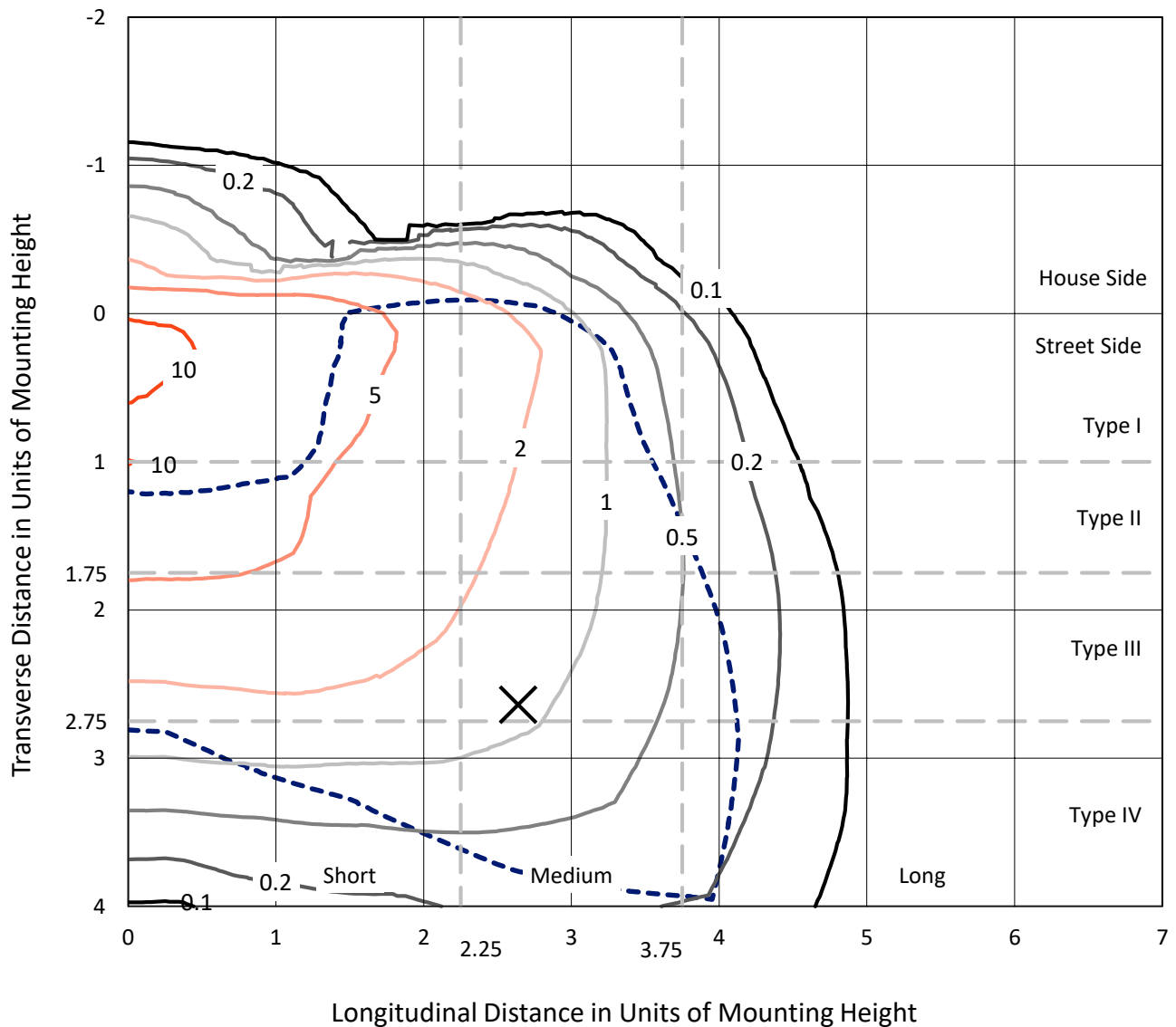


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

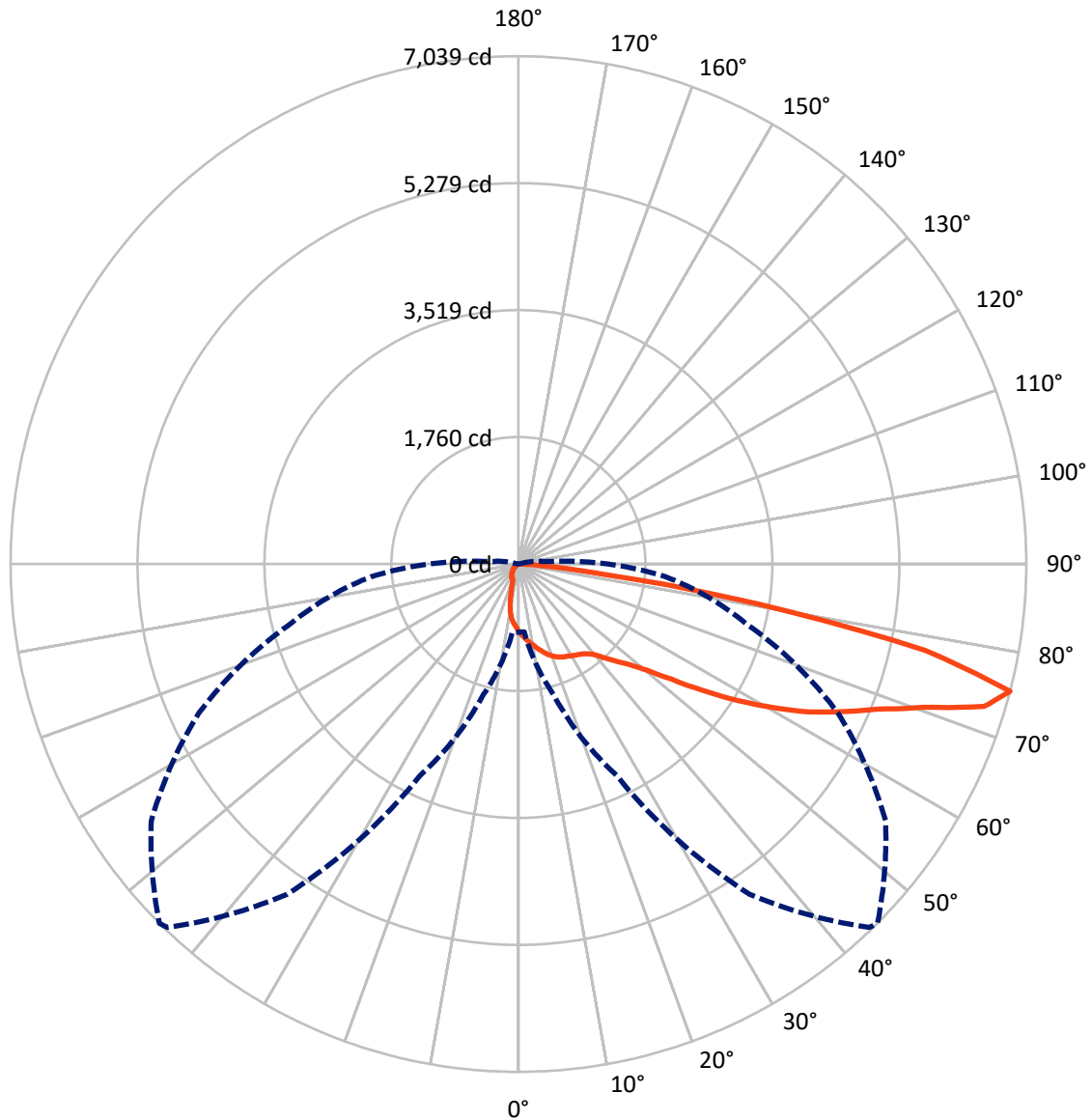


Based on 10 foot mounting height. Maximum calculated value = 12.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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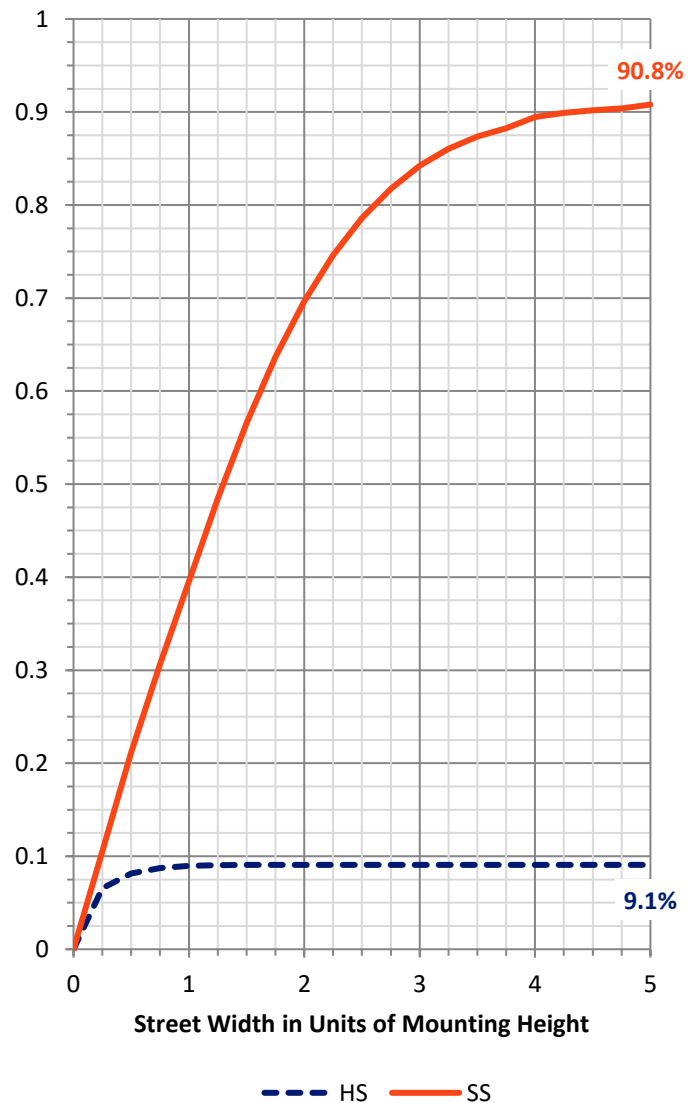
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	800.7	0.0	800.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	7953.3	0.0	7953.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	8754.0	0.0	8754.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	1.0
10°-20°	250.3	2.9
20°-30°	414.6	4.7
30°-40°	600.0	6.9
40°-50°	982.5	11.2
50°-60°	1750.6	20.0
60°-70°	2573.6	29.4
70°-80°	1941.6	22.2
80°-90°	152.3	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°-90°	8754.0	100.0
0°-180°	8754.0	100.0



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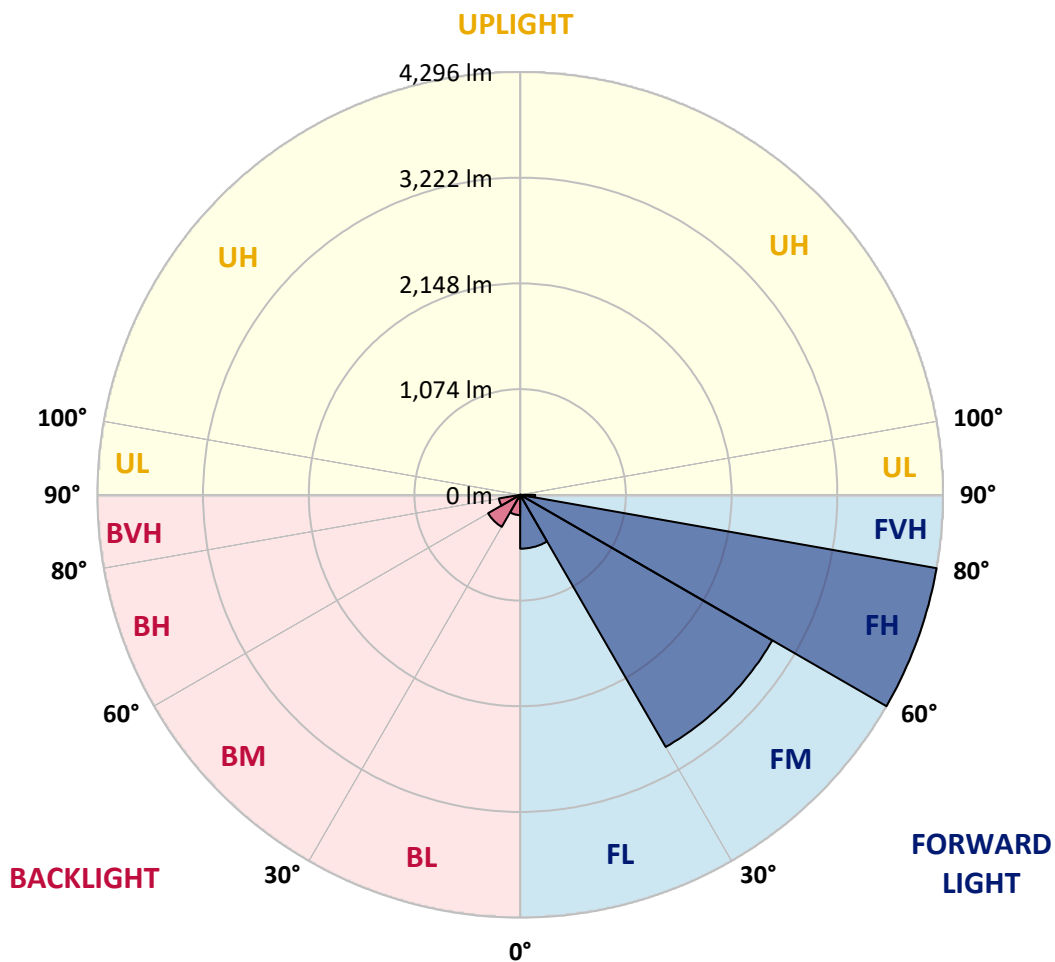
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	547.5	6.3			
FM (30°-60°)	2957.9	33.8			
FH (60°-80°)	4295.9	49.1			G2/5000
FVH (80°-90°)	151.9	1.7			G2/225
BL (0°-30°)	205.8	2.4	B1/500		
BM (30°-60°)	375.2	4.3	B1/1000		
BH (60°-80°)	219.3	2.5	B1/500		G1/500
BVH (80°-90°)	0.4	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3
2.5°	1017.1	1017.1	1015.0	1012.9	1002.6	992.2	990.1	983.9	965.3	952.9	940.4
5°	1102.0	1104.1	1099.9	1089.6	1066.8	1044.0	1041.9	1025.4	990.1	965.3	938.4
7.5°	1182.8	1186.9	1176.6	1157.9	1131.0	1097.9	1095.8	1064.7	1019.1	983.9	944.6
10°	1251.1	1251.1	1236.6	1213.9	1184.9	1149.6	1145.5	1110.3	1058.5	1015.0	963.2
12.5°	1325.7	1323.6	1302.9	1271.9	1238.7	1205.6	1203.5	1160.0	1110.3	1054.4	990.1
15°	1394.1	1389.9	1363.0	1334.0	1298.8	1263.6	1261.5	1218.0	1166.2	1099.9	1029.5
17.5°	1431.4	1429.3	1404.4	1375.4	1346.4	1319.5	1317.4	1271.9	1215.9	1147.6	1068.9
20°	1437.6	1439.6	1418.9	1394.1	1377.5	1363.0	1363.0	1321.6	1261.5	1189.0	1110.3
22.5°	1439.6	1445.9	1431.4	1398.2	1394.1	1396.1	1400.3	1367.1	1305.0	1236.6	1153.8
25°	1454.1	1462.4	1452.1	1412.7	1408.6	1423.1	1427.2	1412.7	1356.8	1288.4	1203.5
27.5°	1483.1	1491.4	1483.1	1433.4	1427.2	1441.7	1445.9	1454.1	1412.7	1338.1	1255.3
30°	1541.1	1543.2	1524.6	1462.4	1450.0	1468.6	1474.9	1497.6	1464.5	1385.8	1305.0
32.5°	1642.6	1621.9	1566.0	1483.1	1472.8	1493.5	1499.7	1524.6	1512.1	1431.4	1356.8
35°	1849.8	1742.1	1613.6	1512.1	1501.8	1522.5	1530.8	1566.0	1572.2	1495.6	1421.0
37.5°	1847.7	1750.4	1725.5	1568.1	1553.6	1568.1	1578.4	1621.9	1646.8	1580.5	1514.2
40°	1978.2	1936.8	1936.8	1673.7	1626.1	1646.8	1657.1	1700.6	1744.1	1692.4	1624.0
42.5°	2388.4	2361.4	2332.4	1876.7	1727.6	1785.6	1791.8	1818.7	1870.5	1853.9	1773.1
45°	2846.1	2821.3	2709.4	2220.6	1901.6	1911.9	1926.4	1969.9	2044.5	2075.6	1980.3
47.5°	3204.5	3179.6	3084.4	2634.9	2172.9	2081.8	2081.8	2166.7	2282.7	2361.4	2270.3
50°	3492.4	3463.4	3405.4	3076.1	2618.3	2326.2	2313.8	2413.2	2585.1	2707.4	2645.2
52.5°	3772.1	3687.2	3651.9	3531.8	3121.6	2680.4	2647.3	2717.7	2955.9	3107.1	3055.4
55°	3958.5	3946.1	3908.8	3950.2	3649.9	3111.3	3082.3	3096.8	3395.1	3496.6	3432.4
57.5°	4132.5	4130.4	4213.3	4405.9	4225.7	3604.3	3558.7	3535.9	3819.7	3794.9	3850.8
60°	4347.9	4310.7	4503.3	4778.8	4753.9	4084.9	4033.1	3987.5	4144.9	4074.5	4352.1
62.5°	4358.3	4347.9	4739.4	5135.1	5278.0	4573.7	4513.7	4350.0	4428.7	4347.9	4830.6
65°	3962.7	4014.4	4838.9	5323.6	5717.2	5002.5	4930.0	4675.2	4681.4	4627.6	5394.0
67.5°	3873.6	3900.5	4565.4	5526.6	6034.1	5435.4	5367.1	5050.2	4975.6	4979.7	5727.5
70°	3651.9	3693.4	4225.7	5512.1	6284.7	6013.4	5945.0	5601.2	5420.9	5220.0	5470.7
72.5°	2790.2	2860.6	3560.8	4832.7	6216.4	6769.4	6750.8	6299.2	5599.1	4793.3	4138.7
75°	944.6	942.5	1870.5	3245.9	5584.6	7001.4	7038.7	6212.2	4884.4	3306.0	2054.9
77.5°	203.0	205.1	385.3	1315.4	3709.9	5621.9	5764.8	4685.6	3150.6	1472.8	470.2
80°	99.4	101.5	159.5	348.0	1483.1	3152.7	3376.4	2409.1	1164.1	294.1	78.7
82.5°	49.7	51.8	82.9	184.4	548.9	1120.6	1197.3	886.6	333.5	165.7	39.4
85°	18.6	18.6	41.4	109.8	250.6	263.1	323.1	256.9	200.9	134.6	10.4
87.5°	4.1	4.1	22.8	53.9	111.9	82.9	82.9	78.7	122.2	91.1	4.1
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°	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3	936.3
2.5°	934.2	925.9	911.4	896.9	886.6	874.1	867.9	861.7	859.6	857.6	861.7
5°	923.9	911.4	884.5	861.7	841.0	824.4	812.0	799.6	793.4	789.2	791.3
7.5°	923.9	905.2	865.9	830.6	797.5	762.3	727.1	700.1	679.4	667.0	669.1
10°	934.2	909.4	857.6	809.9	747.8	673.2	596.6	538.6	499.2	476.4	476.4
12.5°	957.0	923.9	859.6	785.1	679.4	548.9	432.9	362.5	333.5	316.9	319.0
15°	988.1	948.7	870.0	751.9	584.1	408.1	302.4	256.9	256.9	261.0	263.1
17.5°	1023.3	979.8	878.3	702.2	461.9	292.1	238.2	234.1	240.3	250.6	250.6
20°	1058.5	1010.9	882.4	623.5	345.9	232.0	225.8	225.8	229.9	240.3	242.4
22.5°	1102.0	1050.2	878.3	526.1	258.9	219.6	217.5	217.5	217.5	229.9	229.9
25°	1147.6	1095.8	861.7	422.6	219.6	211.3	209.2	207.1	207.1	217.5	219.6
27.5°	1199.4	1143.4	822.4	323.1	207.1	203.0	200.9	196.8	196.8	205.1	205.1
30°	1251.1	1197.3	762.3	244.4	196.8	194.7	190.6	186.4	182.3	190.6	190.6
32.5°	1307.1	1253.2	683.6	194.7	182.3	182.3	180.2	174.0	169.9	174.0	176.1
35°	1381.6	1317.4	594.5	169.9	163.6	163.6	163.6	161.6	153.3	157.4	157.4
37.5°	1481.1	1406.5	490.9	157.4	149.1	145.0	145.0	145.0	138.8	140.9	140.9
40°	1607.4	1510.1	391.5	147.1	138.8	128.4	124.3	126.4	122.2	122.2	120.1
42.5°	1779.4	1621.9	294.1	138.8	130.5	116.0	107.7	105.6	101.5	99.4	99.4
45°	2025.9	1758.6	211.3	130.5	124.3	101.5	93.2	87.0	76.6	70.4	70.4
47.5°	2344.9	1914.0	157.4	122.2	118.1	89.1	78.7	66.3	51.8	47.6	47.6
50°	2734.3	2088.0	132.6	109.8	107.7	78.7	62.1	43.5	29.0	24.9	26.9
52.5°	3113.4	2251.6	118.1	97.4	95.3	68.4	45.6	22.8	12.4	12.4	12.4
55°	3432.4	2367.6	107.7	87.0	82.9	53.9	24.9	10.4	6.2	6.2	6.2
57.5°	3720.3	2433.9	97.4	76.6	66.3	37.3	10.4	4.1	4.1	2.1	2.1
60°	3983.4	2473.3	84.9	66.3	51.8	20.7	4.1	2.1	2.1	0.0	0.0
62.5°	4242.3	2502.3	72.5	53.9	39.4	8.3	2.1	2.1	0.0	0.0	0.0
65°	4439.1	2491.9	58.0	43.5	24.9	4.1	2.1	0.0	0.0	0.0	0.0
67.5°	4432.9	2351.1	43.5	33.1	12.4	2.1	0.0	0.0	0.0	0.0	0.0
70°	3964.7	1980.3	29.0	20.7	4.1	2.1	0.0	0.0	0.0	0.0	0.0
72.5°	2813.0	1269.8	18.6	12.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1238.7	385.3	10.4	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	242.4	89.1	6.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.0	10.4	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.9	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	2.1	0.0	0.0	0.0	0.0	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)