

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: P231357

Luminaire Tested: **ARCH-M-AF48-130-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231357
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-AF48-130-D-U-T4W-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 845mA 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: 12268.2 lumens
Efficiency: N/A
Efficacy: 93.7 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 - G3

Input Watts (W): 131
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

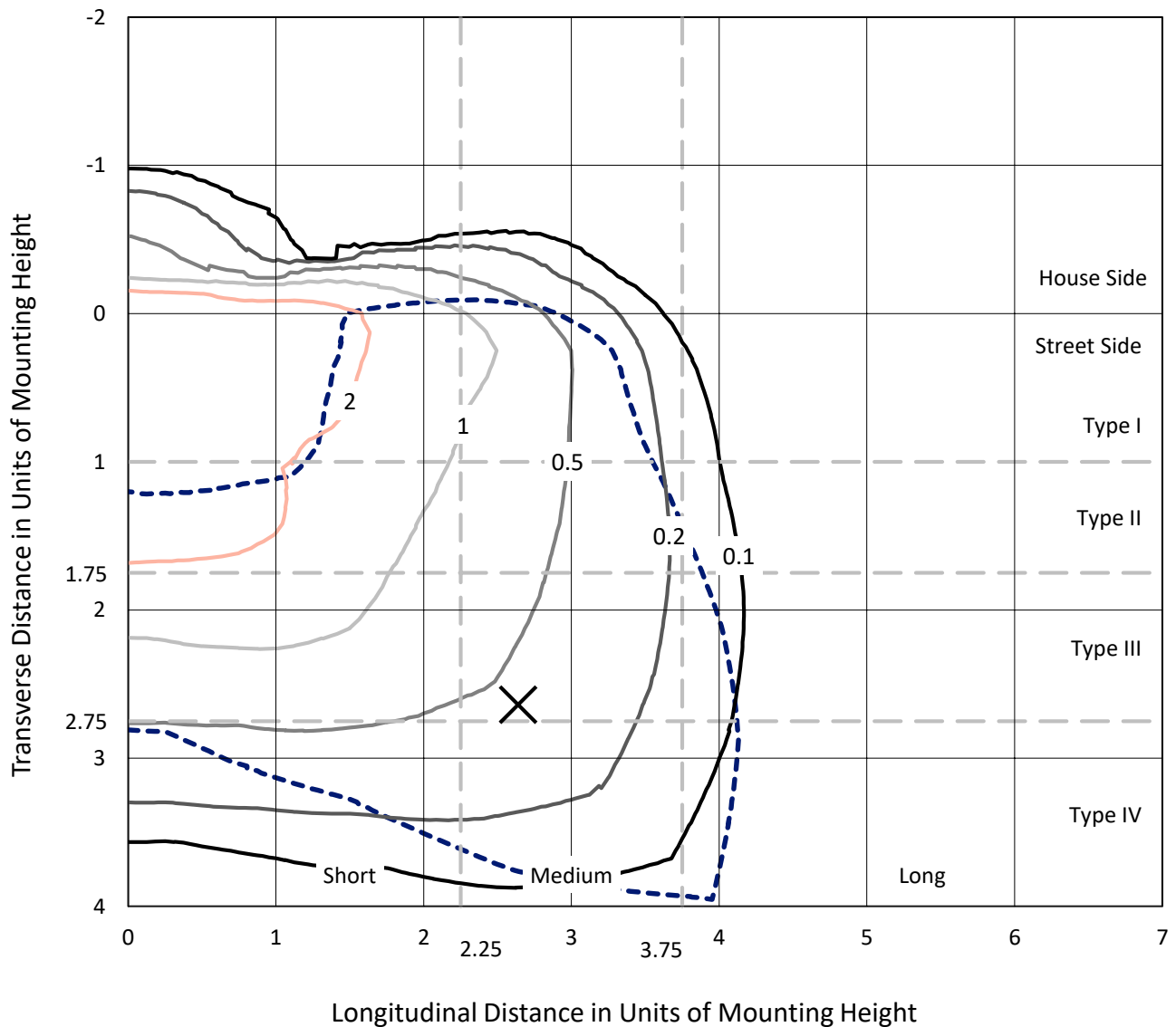


REPORT NUMBER: P231357

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

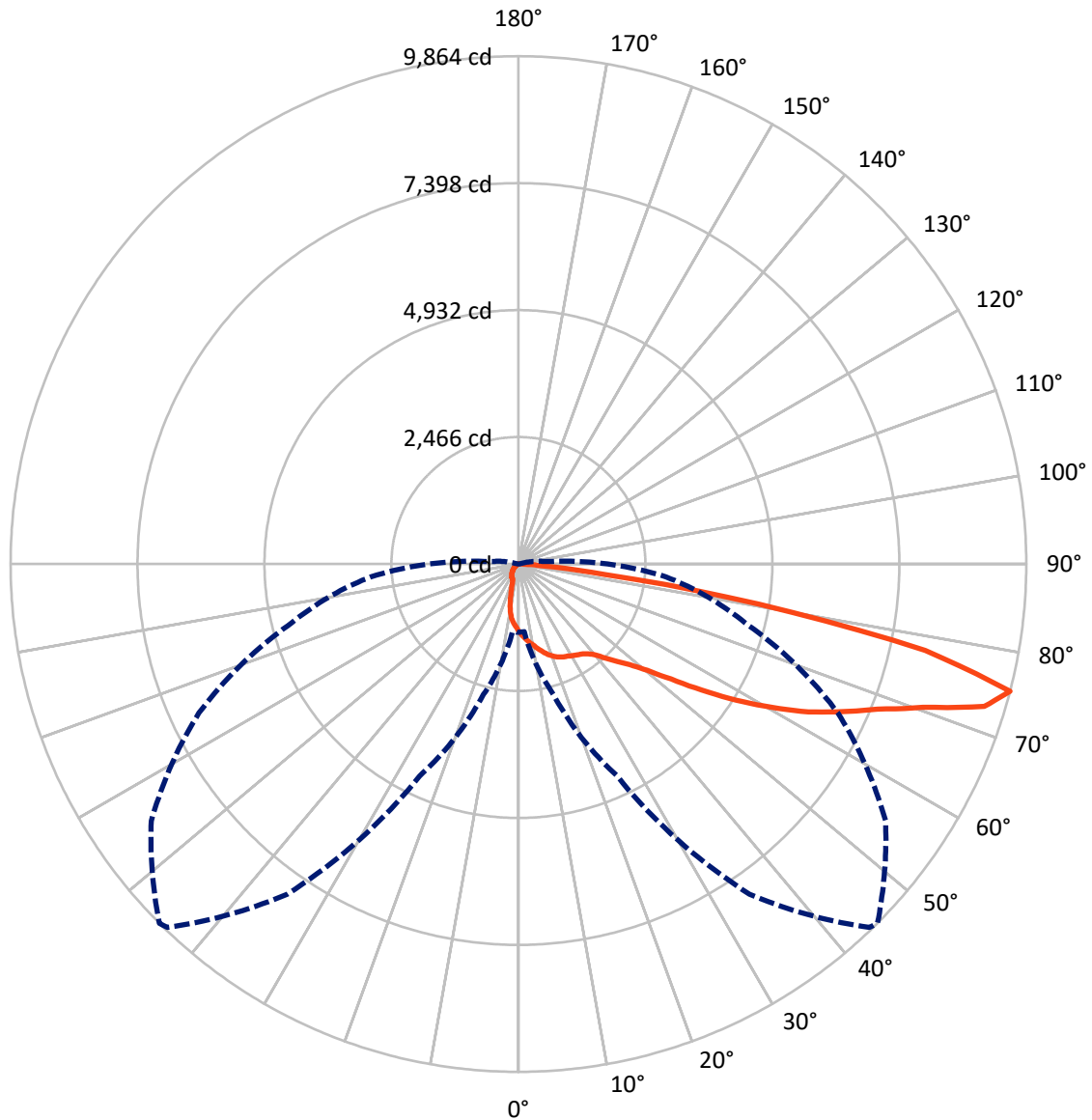


Based on 20 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P231357

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P231357

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T4W-HSS

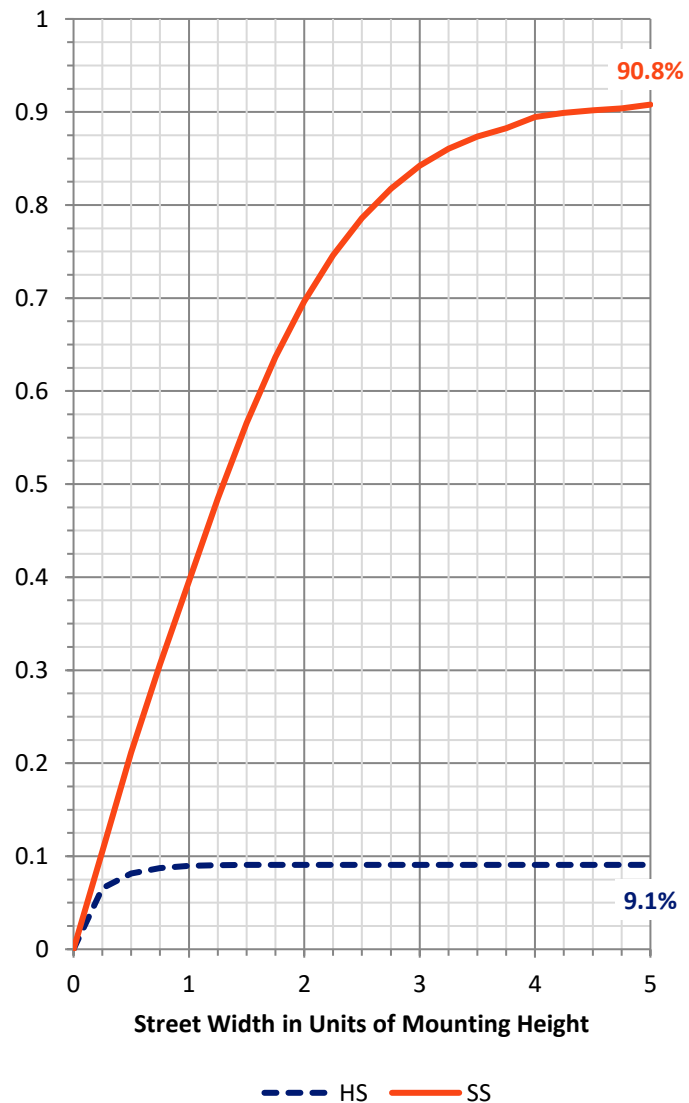
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1122.2	0.0	1122.2
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	11146.1	0.0	11146.1
	% Fixture	90.9	0.0	90.9
Total	Lumens	12268.2	0.0	12268.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.0
10°-20°	350.8	2.9
20°-30°	581.0	4.7
30°-40°	840.9	6.9
40°-50°	1376.9	11.2
50°-60°	2453.4	20.0
60°-70°	3606.8	29.4
70°-80°	2721.0	22.2
80°-90°	213.5	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°-90°	12268.2	100.0
0°-180°	12268.2	100.0



REPORT NUMBER: P231357

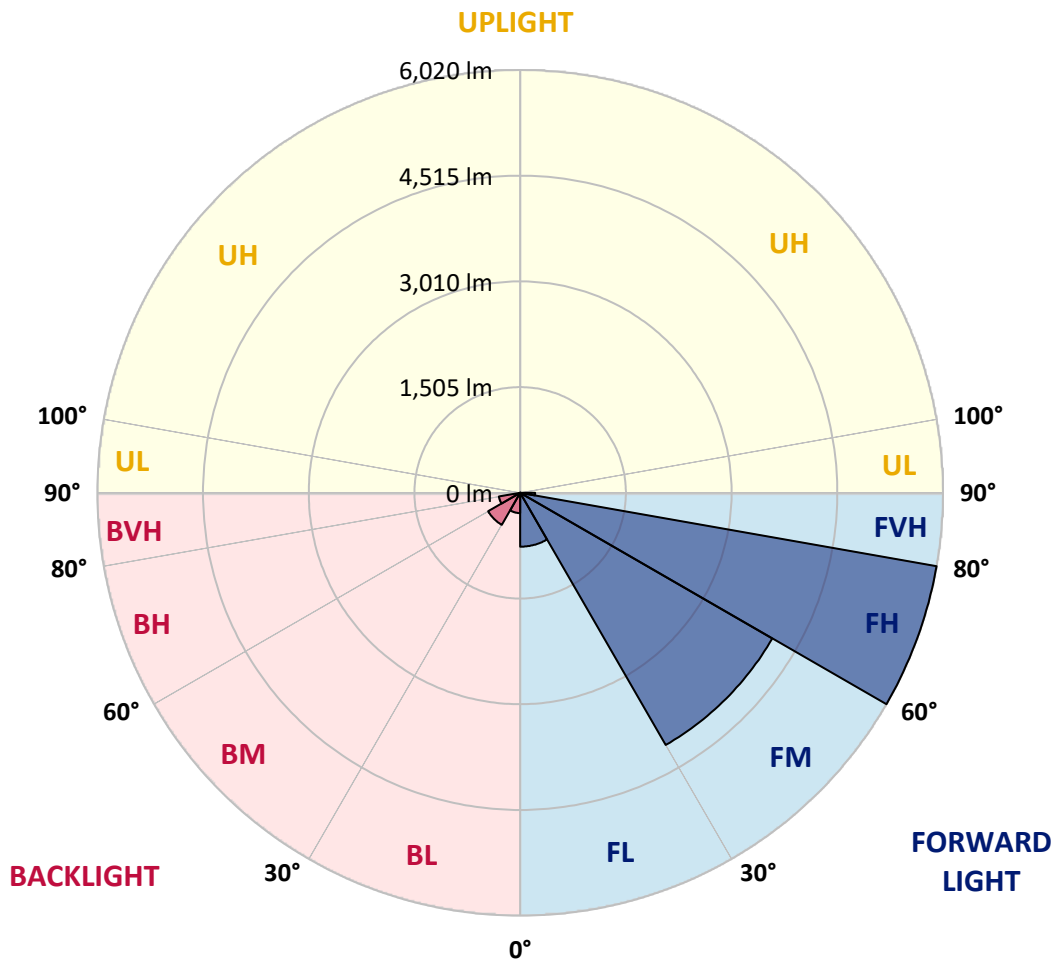
CATALOG NUMBER: ARCH-M-AF48-130-D-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	767.3	6.3			
FM	(30°-60°)	4145.4	33.8			
FH	(60°-80°)	6020.5	49.1			G3/7500
FVH	(80°-90°)	212.9	1.7			G2/225
BL	(0°-30°)	288.4	2.4	B1/500		
BM	(30°-60°)	525.9	4.3	B1/1000		
BH	(60°-80°)	307.4	2.5	B1/500		G1/500
BVH	(80°-90°)	0.6	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-G3

Type IV Medium





REPORT NUMBER: P231357

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1425.4	1425.4	1422.5	1419.5	1405.0	1390.5	1387.6	1378.9	1352.8	1335.4	1318.0
5°	1544.3	1547.3	1541.5	1527.0	1495.0	1463.1	1460.2	1436.9	1387.6	1352.8	1315.1
7.5°	1657.6	1663.4	1648.9	1622.8	1585.1	1538.6	1535.7	1492.2	1428.2	1378.9	1323.8
10°	1753.4	1753.4	1733.1	1701.2	1660.6	1611.1	1605.3	1556.0	1483.5	1422.5	1349.9
12.5°	1857.9	1855.0	1826.0	1782.5	1735.9	1689.5	1686.6	1625.7	1556.0	1477.7	1387.6
15°	1953.7	1947.9	1910.2	1869.5	1820.1	1770.8	1768.0	1707.0	1634.4	1541.5	1442.8
17.5°	2006.0	2003.0	1968.3	1927.5	1886.9	1849.2	1846.3	1782.5	1704.0	1608.3	1497.9
20°	2014.7	2017.6	1988.5	1953.7	1930.5	1910.2	1910.2	1852.2	1768.0	1666.3	1556.0
22.5°	2017.6	2026.3	2006.0	1959.6	1953.7	1956.6	1962.4	1916.0	1828.9	1733.1	1617.0
25°	2037.9	2049.5	2035.0	1979.8	1974.1	1994.3	2000.2	1979.8	1901.5	1805.7	1686.6
27.5°	2078.5	2090.2	2078.5	2008.9	2000.2	2020.5	2026.3	2037.9	1979.8	1875.4	1759.2
30°	2159.9	2162.7	2136.6	2049.5	2032.1	2058.2	2067.0	2098.9	2052.4	1942.1	1828.9
32.5°	2302.0	2273.1	2194.6	2078.5	2064.0	2093.1	2101.8	2136.6	2119.1	2006.0	1901.5
35°	2592.4	2441.4	2261.4	2119.1	2104.7	2133.7	2145.3	2194.6	2203.3	2095.9	1991.5
37.5°	2589.5	2453.0	2418.2	2197.6	2177.2	2197.6	2212.1	2273.1	2307.9	2215.0	2122.1
40°	2772.4	2714.3	2714.3	2345.6	2278.8	2307.9	2322.4	2383.4	2444.3	2371.7	2276.0
42.5°	3347.2	3309.5	3268.7	2630.1	2421.1	2502.3	2511.1	2548.8	2621.4	2598.2	2485.0
45°	3988.7	3953.9	3797.1	3112.0	2665.0	2679.5	2699.8	2760.7	2865.3	2908.8	2775.3
47.5°	4491.0	4456.1	4322.6	3692.6	3045.2	2917.6	2917.6	3036.5	3199.1	3309.5	3181.7
50°	4894.4	4853.8	4772.6	4310.9	3669.4	3260.0	3242.7	3382.0	3623.0	3794.2	3707.2
52.5°	5286.4	5167.3	5118.0	4949.6	4374.9	3756.5	3710.0	3808.8	4142.5	4354.5	4282.0
55°	5547.7	5530.2	5478.0	5536.0	5115.1	4360.3	4319.6	4340.0	4758.1	4900.2	4810.2
57.5°	5791.4	5788.6	5904.7	6174.6	5922.2	5051.2	4987.4	4955.4	5353.1	5318.3	5396.7
60°	6093.4	6041.1	6311.1	6697.3	6662.4	5724.7	5652.1	5588.3	5808.9	5710.2	6099.2
62.5°	6107.9	6093.4	6642.0	7196.6	7396.9	6409.8	6325.6	6096.3	6206.7	6093.4	6769.8
65°	5553.4	5626.0	6781.4	7460.7	8012.3	7010.8	6909.1	6552.1	6560.8	6485.3	7559.4
67.5°	5428.6	5466.3	6398.3	7745.2	8456.4	7617.5	7521.7	7077.5	6973.0	6978.8	8026.8
70°	5118.0	5176.0	5922.2	7724.9	8807.7	8427.4	8331.6	7849.7	7597.1	7315.5	7666.8
72.5°	3910.3	4009.0	4990.3	6772.7	8711.9	9487.1	9460.9	8828.1	7846.9	6717.5	5800.2
75°	1323.8	1320.8	2621.4	4549.0	7826.5	9812.1	9864.4	8706.1	6845.3	4633.1	2879.8
77.5°	284.5	287.3	539.9	1843.4	5199.2	7878.8	8079.1	6566.6	4415.5	2064.0	659.0
80°	139.3	142.3	223.5	487.7	2078.5	4418.3	4731.9	3376.1	1631.5	412.2	110.3
82.5°	69.7	72.5	116.1	258.4	769.3	1570.5	1677.9	1242.5	467.4	232.2	55.1
85°	26.1	26.1	58.1	153.9	351.3	368.7	452.9	360.0	281.6	188.7	14.5
87.5°	5.8	5.8	31.9	75.5	156.7	116.1	116.1	110.3	171.2	127.8	5.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P231357

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1309.3	1297.6	1277.4	1257.0	1242.5	1225.1	1216.4	1207.7	1204.7	1201.9	1207.7
5°	1294.7	1277.4	1239.6	1207.7	1178.6	1155.4	1137.9	1120.5	1111.8	1106.0	1109.0
7.5°	1294.7	1268.6	1213.4	1164.1	1117.7	1068.3	1019.0	981.2	952.2	934.8	937.6
10°	1309.3	1274.4	1201.9	1135.1	1048.0	943.5	836.1	754.7	699.6	667.7	667.7
12.5°	1341.2	1294.7	1204.7	1100.3	952.2	769.3	606.7	508.0	467.4	444.2	447.0
15°	1384.8	1329.5	1219.3	1053.7	818.7	571.9	423.8	360.0	360.0	365.8	368.7
17.5°	1434.1	1373.1	1230.9	984.1	647.3	409.3	333.9	328.1	336.8	351.3	351.3
20°	1483.5	1416.7	1236.6	873.8	484.8	325.1	316.4	316.4	322.2	336.8	339.6
22.5°	1544.3	1471.8	1230.9	737.3	362.8	307.7	304.8	304.8	304.8	322.2	322.2
25°	1608.3	1535.7	1207.7	592.2	307.7	296.1	293.2	290.3	290.3	304.8	307.7
27.5°	1680.8	1602.5	1152.5	452.9	290.3	284.5	281.6	275.8	275.8	287.3	287.3
30°	1753.4	1677.9	1068.3	342.6	275.8	272.9	267.1	261.3	255.4	267.1	267.1
32.5°	1831.8	1756.3	958.0	272.9	255.4	255.4	252.6	243.9	238.0	243.9	246.7
35°	1936.3	1846.3	833.2	238.0	229.3	229.3	229.3	226.5	214.8	220.7	220.7
37.5°	2075.7	1971.1	688.0	220.7	209.0	203.3	203.3	203.3	194.5	197.4	197.4
40°	2252.7	2116.3	548.7	206.1	194.5	179.9	174.2	177.1	171.2	171.2	168.4
42.5°	2493.6	2273.1	412.2	194.5	182.9	162.5	151.0	148.0	142.3	139.3	139.3
45°	2839.1	2464.6	296.1	182.9	174.2	142.3	130.6	121.9	107.4	98.7	98.7
47.5°	3286.2	2682.4	220.7	171.2	165.5	124.8	110.3	92.9	72.5	66.8	66.8
50°	3832.0	2926.3	185.8	153.9	151.0	110.3	87.1	61.0	40.6	34.9	37.7
52.5°	4363.2	3155.6	165.5	136.5	133.5	95.7	63.8	31.9	17.4	17.4	17.4
55°	4810.2	3318.1	151.0	121.9	116.1	75.5	34.9	14.5	8.7	8.7	8.7
57.5°	5213.8	3411.0	136.5	107.4	92.9	52.3	14.5	5.8	5.8	2.9	2.9
60°	5582.4	3466.2	119.1	92.9	72.5	29.1	5.8	2.9	2.9	0.0	0.0
62.5°	5945.4	3506.8	101.6	75.5	55.1	11.7	2.9	2.9	0.0	0.0	0.0
65°	6221.2	3492.4	81.3	61.0	34.9	5.8	2.9	0.0	0.0	0.0	0.0
67.5°	6212.4	3294.9	61.0	46.4	17.4	2.9	0.0	0.0	0.0	0.0	0.0
70°	5556.4	2775.3	40.6	29.1	5.8	2.9	0.0	0.0	0.0	0.0	0.0
72.5°	3942.2	1779.5	26.1	17.4	2.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	1735.9	539.9	14.5	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	339.6	124.8	8.7	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	81.3	14.5	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	2.9	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)