

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: P258186

Luminaire Tested: **ARCH-M-AF48-130-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258186
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-AF48-130-D-U-T2U-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA 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: 10873.5 lumens
Efficiency: N/A
Efficacy: 83.0 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

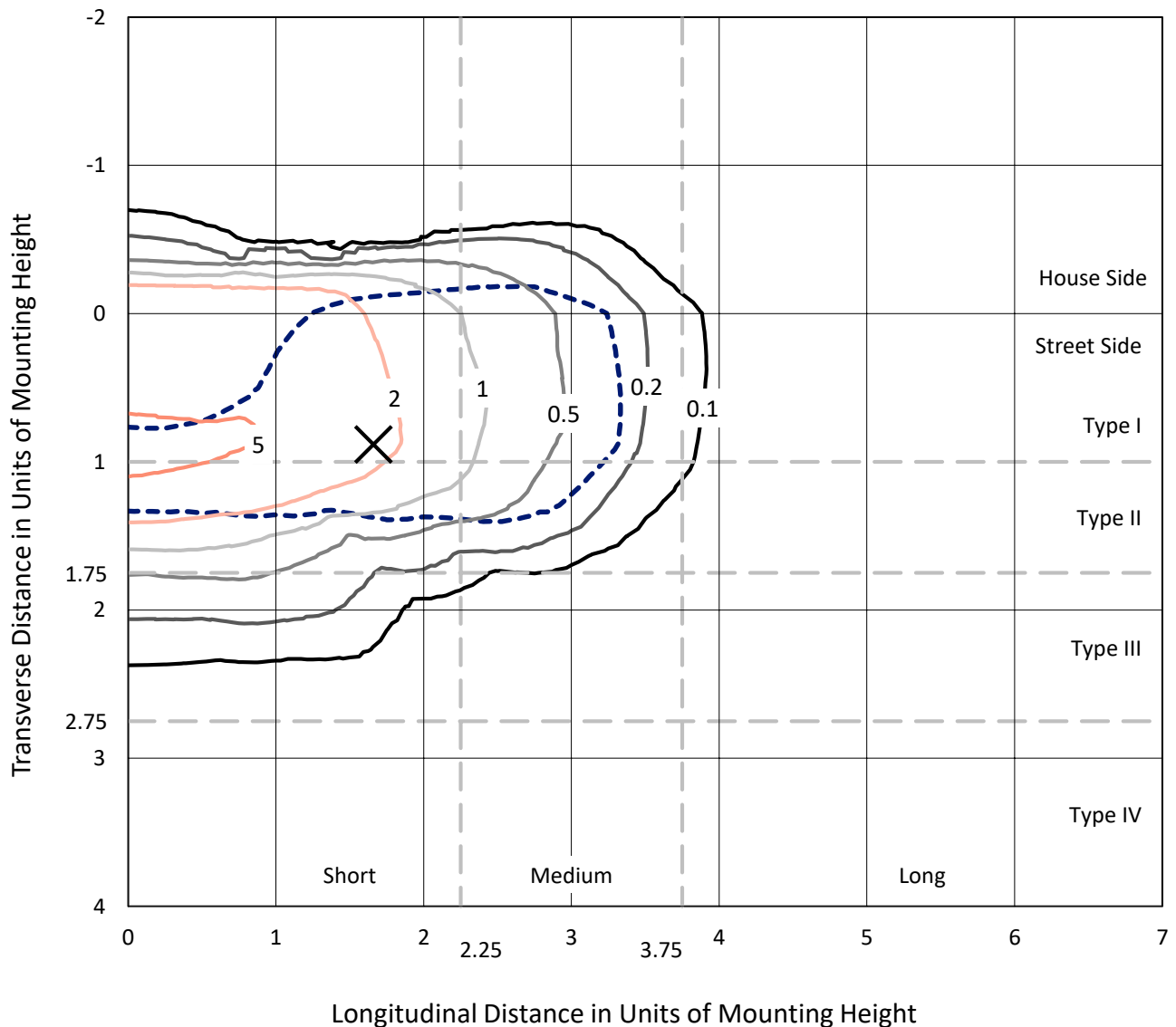
Input Watts (W): 131
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

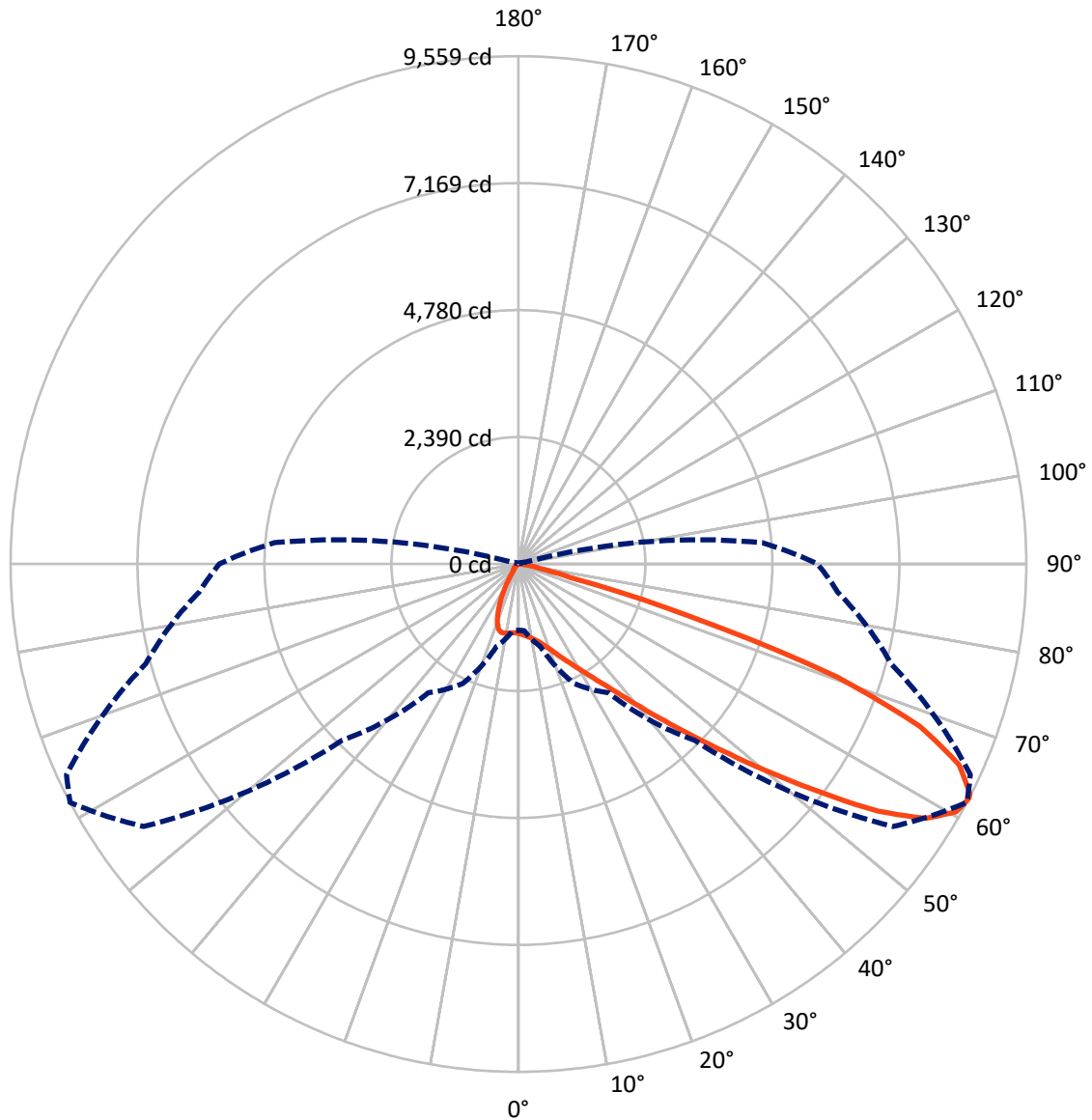


Based on 20 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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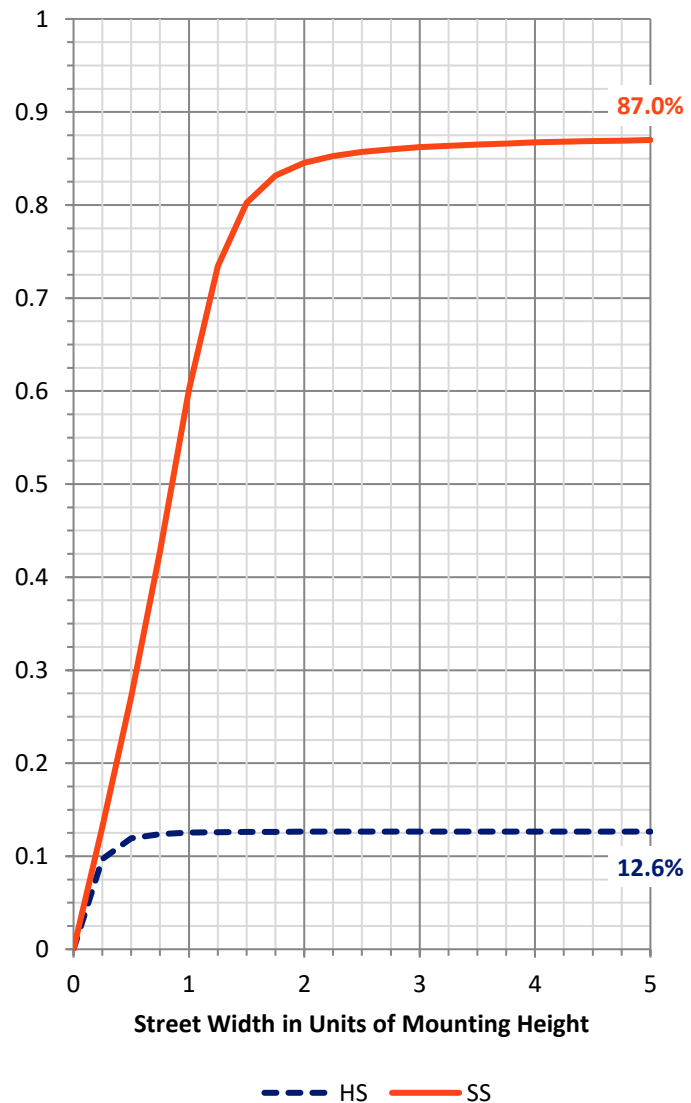
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1390.3	0.0	1390.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9483.2	0.0	9483.2
	% Fixture	87.2	0.0	87.2
Total	Lumens	10873.5	0.0	10873.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	1.2
10°-20°	352.0	3.2
20°-30°	591.2	5.4
30°-40°	1133.2	10.4
40°-50°	2314.7	21.3
50°-60°	3063.1	28.2
60°-70°	2379.5	21.9
70°-80°	858.9	7.9
80°-90°	54.7	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°	10873.5	100.0
0°-180°	10873.5	100.0



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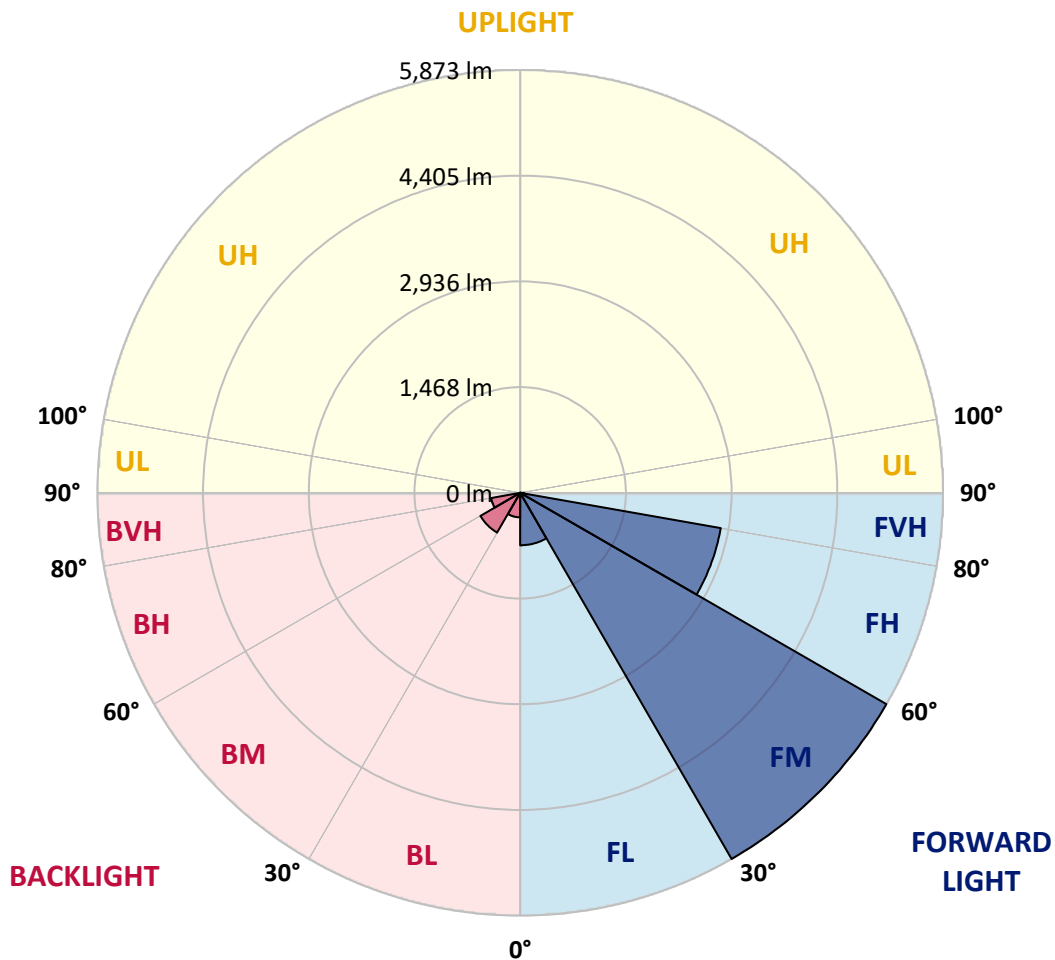
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	729.0	6.7			
FM	(30°-60°)	5872.8	54.0			
FH	(60°-80°)	2829.0	26.0			G2/5000
FVH	(80°-90°)	52.4	0.5			G1/100
BL	(0°-30°)	340.3	3.1	B1/500		
BM	(30°-60°)	638.3	5.9	B1/1000		
BH	(60°-80°)	409.4	3.8	B1/500		G1/500
BVH	(80°-90°)	2.4	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8
2.5°	1344.7	1341.9	1339.3	1336.6	1336.6	1333.9	1331.3	1325.9	1320.5	1315.2	1312.5
5°	1368.7	1366.0	1363.3	1366.0	1363.3	1363.3	1360.6	1355.3	1349.9	1341.9	1333.9
7.5°	1387.4	1384.8	1382.0	1384.8	1387.4	1390.0	1392.7	1387.4	1384.8	1374.1	1366.0
10°	1411.4	1408.8	1406.0	1411.4	1411.4	1424.8	1427.5	1424.8	1422.1	1414.2	1400.7
12.5°	1446.1	1448.9	1448.9	1454.2	1459.6	1475.5	1480.9	1473.0	1473.0	1462.2	1446.1
15°	1510.3	1510.3	1510.3	1515.7	1518.3	1539.8	1545.2	1537.1	1542.4	1523.7	1507.7
17.5°	1571.8	1574.5	1579.9	1590.5	1590.5	1609.3	1620.0	1620.0	1630.5	1606.5	1585.3
20°	1633.3	1635.9	1644.1	1668.1	1668.1	1692.1	1710.8	1718.8	1729.6	1705.4	1668.1
22.5°	1700.2	1700.2	1713.5	1750.9	1742.9	1791.0	1825.7	1839.2	1849.9	1817.7	1759.0
25°	1801.6	1791.0	1801.6	1836.4	1831.0	1898.0	1962.1	1975.5	1988.8	1951.4	1863.2
27.5°	1994.2	1978.1	1940.8	1943.4	1943.4	2021.0	2111.8	2130.5	2138.5	2106.4	1996.8
30°	2379.1	2379.1	2240.2	2146.5	2085.1	2154.6	2282.9	2314.9	2325.7	2277.5	2133.2
32.5°	3050.1	3050.1	2793.4	2555.6	2323.0	2323.0	2470.1	2528.8	2539.5	2483.4	2314.9
35°	3905.5	3900.1	3515.2	3189.1	2734.6	2563.5	2689.2	2788.1	2820.2	2745.3	2550.2
37.5°	4814.4	4779.6	4365.2	3991.0	3368.3	2948.5	2985.9	3116.9	3146.3	3084.8	2855.0
40°	5552.1	5512.0	5177.9	4865.2	4186.2	3563.4	3413.6	3533.9	3568.6	3483.1	3218.4
42.5°	6220.4	6121.6	5891.7	5667.2	5127.1	4627.2	3983.0	4031.1	4068.6	3977.7	3627.5
45°	6704.2	6551.9	6434.3	6364.8	6078.7	5795.4	4720.8	4624.6	4637.9	4525.6	4074.0
47.5°	6717.7	6610.7	6621.4	6803.2	6920.8	6910.1	5680.5	5338.3	5287.5	5100.4	4549.8
50°	6076.1	6137.6	6332.7	6851.3	7487.5	7872.4	6821.9	6183.1	6030.7	5693.8	5022.8
52.5°	5006.8	5103.1	5469.3	6343.5	7570.5	8506.1	8006.2	7148.1	6875.3	6282.0	5386.5
55°	3921.6	3926.9	4311.8	5202.0	7017.0	8621.0	8952.4	8209.3	7792.3	6728.4	5627.1
57.5°	2697.2	2844.2	3333.4	3932.2	5768.7	8048.9	9308.1	9032.7	8495.4	7003.7	5795.4
60°	1766.9	1775.0	2344.3	3036.8	3926.9	6549.2	9091.5	9468.4	9064.7	7166.8	5910.4
62°	1245.7	1259.1	1611.9	2480.7	2959.2	4694.1	8612.9	9559.2	9385.5	7263.0	6030.7
62.5°	1154.8	1165.5	1462.2	2341.7	2780.1	4210.2	8441.9	9537.9	9433.7	7295.1	6073.4
65°	847.5	847.5	957.0	1609.3	2036.9	2274.9	7153.4	9112.9	9369.4	7551.7	6233.8
67.5°	654.9	660.3	697.7	991.7	1537.1	1379.4	4565.7	8155.8	8701.2	7931.2	6324.7
70°	564.0	561.4	588.2	657.6	1109.4	916.9	2010.3	6364.8	7287.0	7835.1	6241.9
72.5°	417.1	419.7	481.2	577.4	772.6	596.1	908.9	3378.9	4726.1	6132.2	5349.0
75°	267.3	270.0	339.5	454.4	556.0	390.3	523.9	1007.8	1935.4	3400.2	3272.0
77.5°	179.0	184.4	221.9	318.1	486.5	243.2	328.8	422.4	582.8	1275.0	1173.6
80°	120.3	120.3	141.7	213.8	307.4	203.1	176.5	280.7	302.1	395.6	197.9
82.5°	80.2	80.2	93.5	141.7	200.5	181.8	107.0	152.4	176.5	197.9	69.5
85°	48.1	48.1	64.1	88.2	131.0	101.6	69.5	85.5	90.9	125.6	37.4
87.5°	29.4	26.8	42.7	61.5	69.5	61.5	45.5	45.5	48.1	69.5	18.7
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°	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8	1309.8
2.5°	1307.2	1304.5	1301.9	1296.5	1288.5	1283.1	1277.8	1272.5	1267.1	1267.1	1275.0
5°	1331.3	1323.2	1312.5	1301.9	1285.8	1275.0	1267.1	1256.4	1251.0	1251.0	1253.8
7.5°	1360.6	1352.6	1333.9	1315.2	1291.1	1272.5	1253.8	1229.6	1210.9	1203.0	1210.9
10°	1392.7	1382.0	1355.3	1325.9	1299.2	1251.0	1189.5	1114.7	1050.5	1021.1	1034.4
12.5°	1432.8	1419.5	1387.4	1347.2	1285.8	1168.2	1015.8	842.1	732.5	681.7	692.3
15°	1491.6	1473.0	1427.5	1366.0	1229.6	975.6	727.1	526.6	425.0	382.3	387.7
17.5°	1561.1	1537.1	1475.5	1360.6	1085.3	703.1	433.1	307.4	264.6	253.9	253.9
20°	1635.9	1603.9	1523.7	1320.5	866.1	441.1	270.0	235.2	219.2	211.2	211.2
22.5°	1713.5	1670.7	1563.8	1227.0	617.6	275.4	221.9	197.9	179.0	171.1	171.1
25°	1807.0	1750.9	1603.9	1063.9	393.0	221.9	189.8	165.7	147.1	136.3	139.0
27.5°	1916.6	1844.6	1638.7	860.8	253.9	192.6	157.8	133.7	117.7	112.3	112.3
30°	2031.5	1946.0	1646.6	644.2	205.9	165.7	131.0	109.6	98.9	93.5	93.5
32.5°	2189.3	2077.0	1622.6	427.7	173.7	139.0	109.6	90.9	82.8	80.2	80.2
35°	2397.8	2248.1	1566.4	264.6	147.1	114.9	90.9	80.2	72.2	69.5	69.5
37.5°	2662.4	2486.0	1467.6	181.8	125.6	93.5	77.6	69.5	64.1	61.5	61.5
40°	3015.3	2774.7	1339.3	157.8	107.0	80.2	66.8	61.5	56.2	56.2	56.2
42.5°	3389.6	3125.0	1173.6	139.0	90.9	69.5	58.8	53.4	50.8	48.1	48.1
45°	3798.6	3483.1	967.7	122.9	77.6	61.5	53.4	45.5	42.7	42.7	42.7
47.5°	4204.9	3852.1	743.2	107.0	66.8	53.4	45.5	40.1	37.4	34.8	34.8
50°	4621.8	4186.2	545.3	93.5	58.8	48.1	40.1	34.8	29.4	26.8	26.8
52.5°	4924.0	4386.6	398.2	80.2	50.8	40.1	32.1	26.8	21.5	18.7	18.7
55°	5145.9	4509.6	291.4	66.8	45.5	34.8	26.8	21.5	16.1	16.1	13.3
57.5°	5319.7	4568.4	219.2	58.8	40.1	29.4	21.5	16.1	13.3	10.7	10.7
60°	5453.2	4571.1	163.1	48.1	34.8	24.0	16.1	10.7	7.9	7.9	7.9
62°	5629.7	4605.9	133.7	40.1	32.1	21.5	13.3	7.9	5.4	2.6	2.6
62.5°	5680.5	4619.3	128.3	40.1	29.4	18.7	10.7	7.9	5.4	2.6	2.6
65°	5915.8	4643.3	98.9	32.1	24.0	16.1	7.9	5.4	0.0	0.0	0.0
67.5°	6129.6	4605.9	72.2	24.0	18.7	10.7	7.9	2.6	0.0	0.0	0.0
70°	6108.1	4349.3	50.8	16.1	13.3	7.9	5.4	0.0	0.0	0.0	0.0
72.5°	5033.6	3255.9	34.8	13.3	7.9	5.4	2.6	0.0	0.0	0.0	0.0
75°	3039.4	1424.8	24.0	7.9	7.9	5.4	2.6	0.0	0.0	0.0	0.0
77.5°	997.1	515.9	16.1	5.4	5.4	2.6	2.6	0.0	0.0	0.0	0.0
80°	163.1	85.5	7.9	5.4	5.4	2.6	2.6	0.0	0.0	0.0	0.0
82.5°	50.8	21.5	5.4	5.4	2.6	2.6	0.0	0.0	0.0	0.0	0.0
85°	18.7	7.9	5.4	5.4	2.6	2.6	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	5.4	5.4	5.4	2.6	2.6	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)