

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: P265822

Luminaire Tested: **ARCH-M-AF48-110-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265822
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-AF48-110-D-U-T4W-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 720mA 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: 9190.6 lumens
Efficiency: N/A
Efficacy: 82.8 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): 111
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

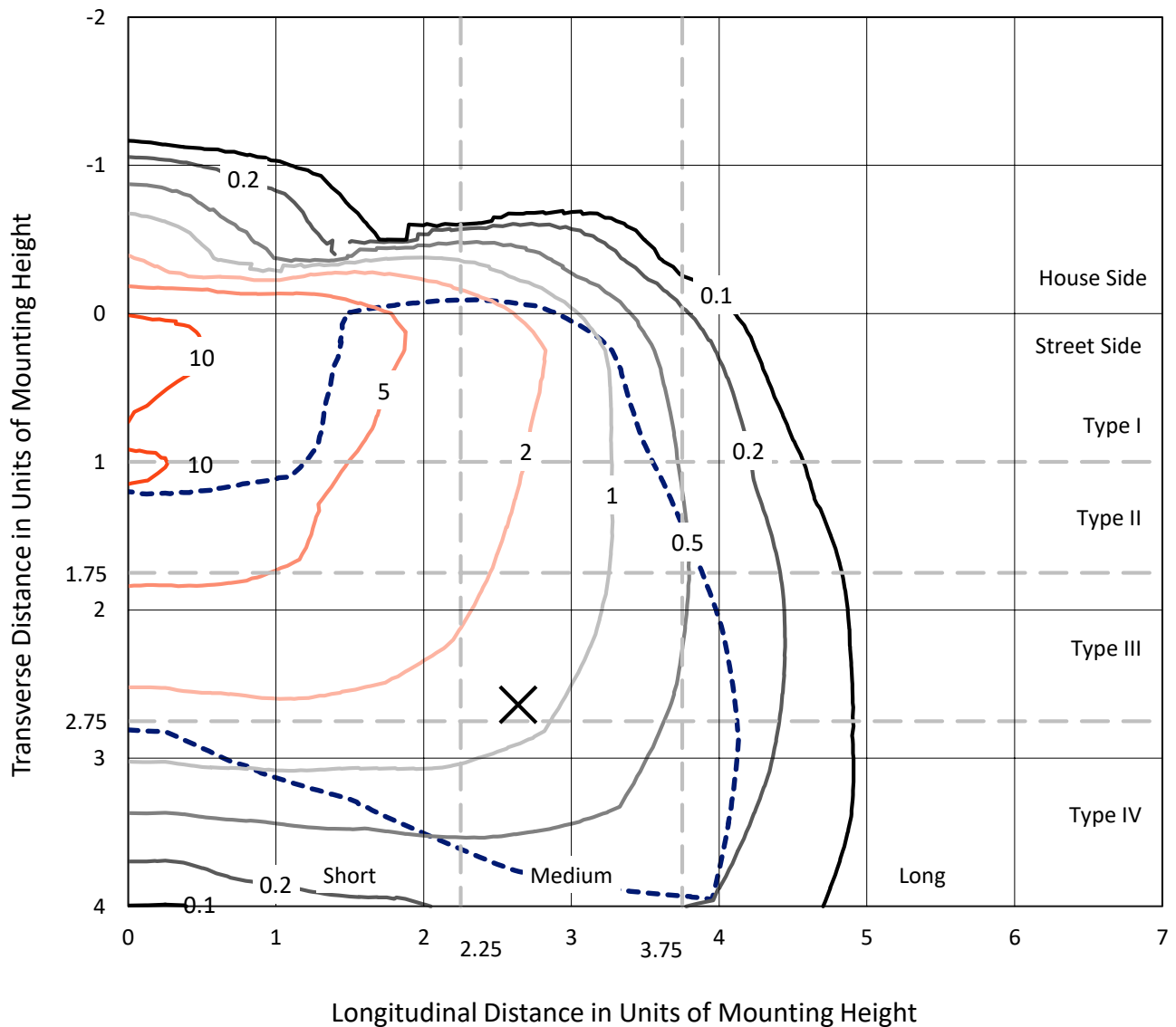


REPORT NUMBER: P265822

CATALOG NUMBER: ARCH-M-AF48-110-D-U-T4W-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

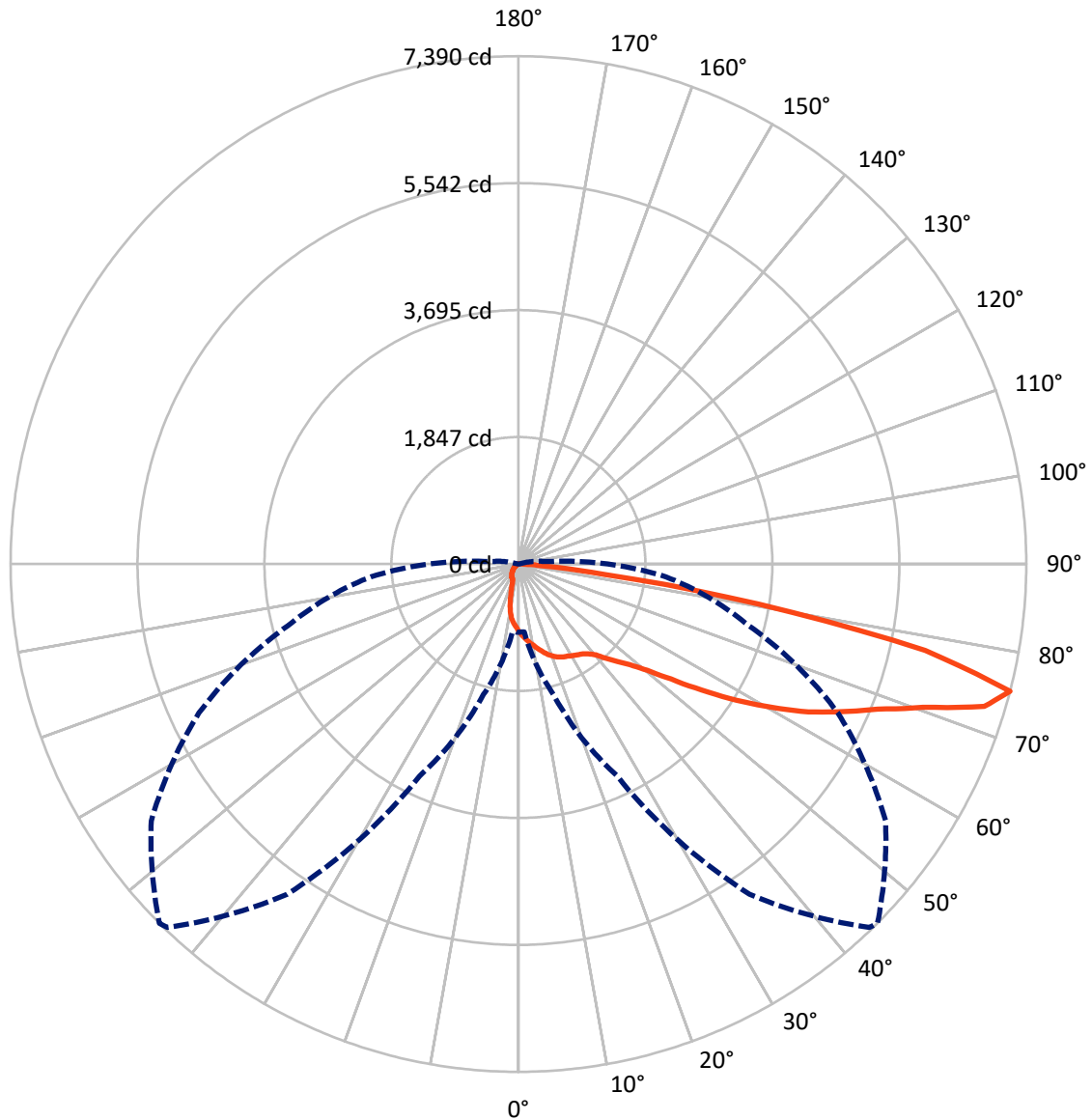


Based on 10 foot mounting height. Maximum calculated value = 13.1 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265822

CATALOG NUMBER: ARCH-M-AF48-110-D-U-T4W-7027-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265822

CATALOG NUMBER: ARCH-M-AF48-110-D-U-T4W-7027-HSS

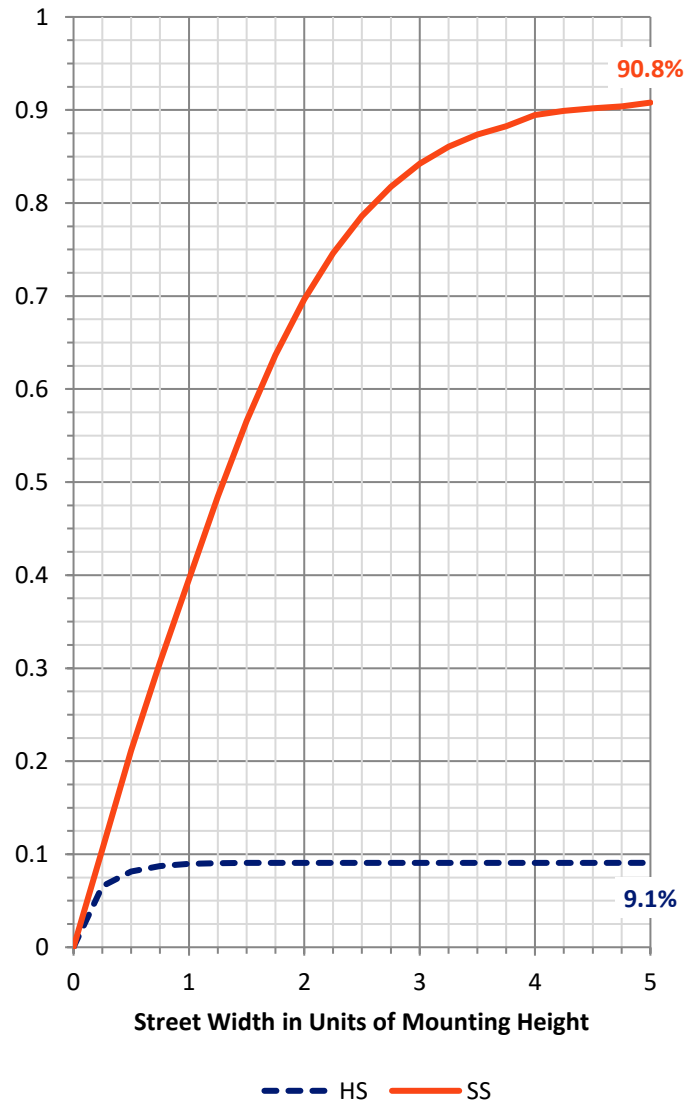
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	840.6	0.0	840.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8350.0	0.0	8350.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	9190.6	0.0	9190.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	1.0
10°-20°	262.8	2.9
20°-30°	435.3	4.7
30°-40°	629.9	6.9
40°-50°	1031.5	11.2
50°-60°	1837.9	20.0
60°-70°	2702.0	29.4
70°-80°	2038.4	22.2
80°-90°	159.9	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°	9190.6	100.0
0°-180°	9190.6	100.0



REPORT NUMBER: P265822

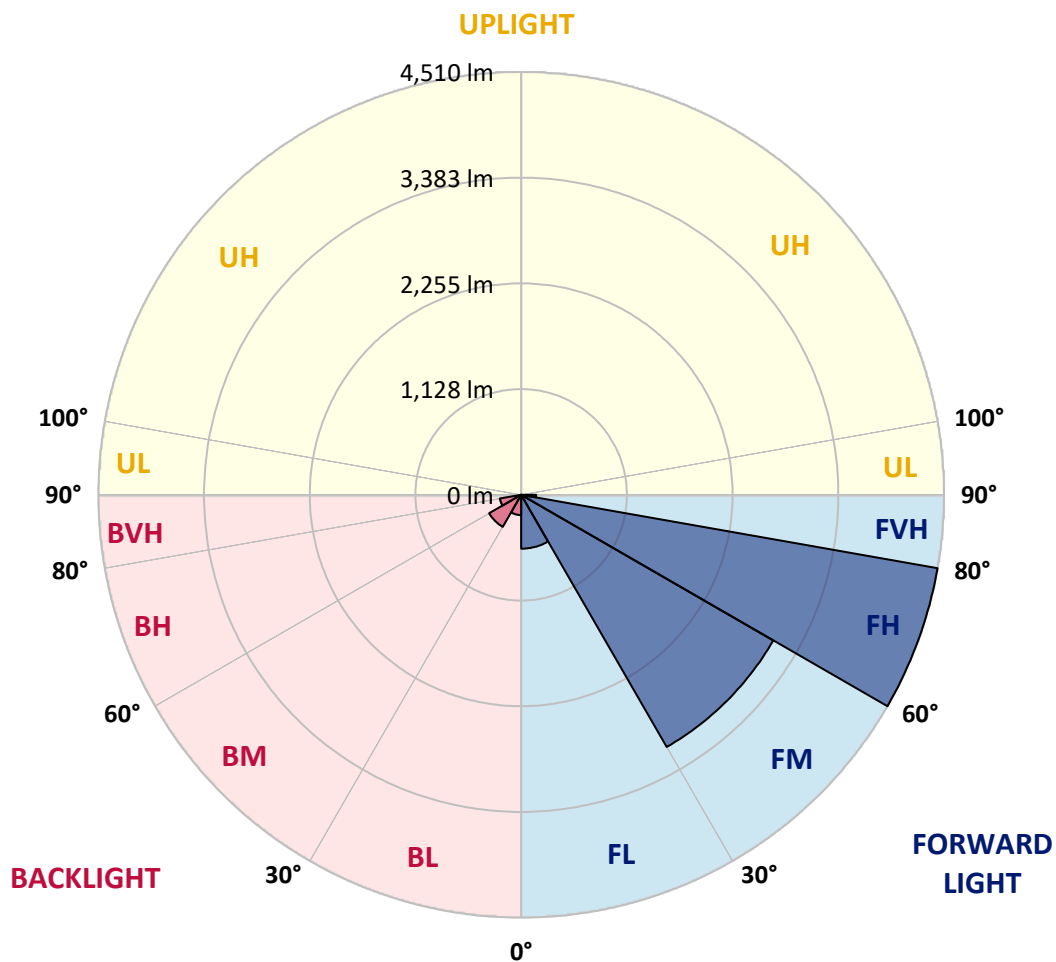
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	574.9	6.3			
FM	(30°-60°)	3105.5	33.8			
FH	(60°-80°)	4510.2	49.1			G2/5000
FVH	(80°-90°)	159.5	1.7			G2/225
BL	(0°-30°)	216.0	2.4	B1/500		
BM	(30°-60°)	393.9	4.3	B1/1000		
BH	(60°-80°)	230.3	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





REPORT NUMBER: P265822

CATALOG NUMBER: ARCH-M-AF48-110-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9
2.5°	1067.7	1067.7	1065.6	1063.5	1052.5	1041.8	1039.5	1033.1	1013.5	1000.4	987.3
5°	1156.9	1159.2	1154.9	1143.9	1119.9	1096.1	1093.9	1076.4	1039.5	1013.5	985.1
7.5°	1241.7	1246.0	1235.3	1215.6	1187.4	1152.6	1150.4	1117.9	1070.1	1033.1	991.6
10°	1313.5	1313.5	1298.3	1274.3	1244.0	1207.1	1202.7	1165.7	1111.4	1065.6	1011.2
12.5°	1391.8	1389.7	1367.8	1335.3	1300.4	1265.7	1263.6	1217.8	1165.7	1106.9	1039.5
15°	1463.6	1459.2	1431.0	1400.5	1363.5	1326.5	1324.5	1278.7	1224.4	1154.9	1080.8
17.5°	1502.8	1500.6	1474.5	1444.0	1413.7	1385.2	1383.1	1335.3	1276.6	1204.7	1122.2
20°	1509.2	1511.5	1489.7	1463.6	1446.2	1431.0	1431.0	1387.5	1324.5	1248.4	1165.7
22.5°	1511.5	1518.0	1502.8	1467.9	1463.6	1465.8	1470.2	1435.3	1370.0	1298.3	1211.4
25°	1526.7	1535.4	1524.6	1483.2	1478.8	1494.1	1498.5	1483.2	1424.4	1352.7	1263.6
27.5°	1557.1	1565.8	1557.1	1504.9	1498.5	1513.6	1518.0	1526.7	1483.2	1404.9	1318.0
30°	1617.9	1620.3	1600.6	1535.4	1522.3	1541.9	1548.4	1572.4	1537.5	1455.0	1370.0
32.5°	1724.6	1702.8	1644.1	1557.1	1546.3	1568.0	1574.5	1600.6	1587.6	1502.8	1424.4
35°	1942.0	1828.9	1694.2	1587.6	1576.6	1598.4	1607.2	1644.1	1650.6	1570.1	1491.8
37.5°	1939.9	1837.7	1811.5	1646.2	1631.1	1646.2	1657.2	1702.8	1728.9	1659.3	1589.7
40°	2076.9	2033.5	2033.5	1757.2	1707.1	1728.9	1739.7	1785.6	1831.1	1776.8	1705.1
42.5°	2507.4	2479.2	2448.8	1970.3	1813.8	1874.7	1881.1	1909.4	1963.8	1946.4	1861.6
45°	2988.1	2962.0	2844.6	2331.3	1996.5	2007.4	2022.5	2068.2	2146.5	2179.1	2079.0
47.5°	3364.3	3338.2	3238.2	2766.3	2281.2	2185.7	2185.7	2274.8	2396.6	2479.2	2383.6
50°	3666.6	3636.2	3575.3	3229.4	2748.9	2442.2	2429.1	2533.6	2714.0	2842.3	2777.1
52.5°	3960.2	3871.1	3834.1	3707.9	3277.3	2814.1	2779.4	2853.2	3103.4	3262.1	3207.8
55°	4155.9	4143.0	4103.7	4147.3	3831.9	3266.4	3236.1	3251.2	3564.5	3671.0	3603.6
57.5°	4338.6	4336.5	4423.4	4625.7	4436.5	3784.0	3736.2	3712.2	4010.3	3984.2	4042.8
60°	4564.7	4525.7	4727.9	5017.2	4991.1	4288.6	4234.3	4186.5	4351.7	4277.6	4569.0
62.5°	4575.6	4564.7	4975.8	5391.2	5541.3	4801.8	4738.7	4567.0	4649.5	4564.7	5071.6
65°	4160.3	4214.7	5080.3	5589.1	6002.2	5252.0	5175.9	4908.3	4914.9	4858.4	5663.1
67.5°	4066.7	4095.1	4793.1	5802.2	6335.0	5706.6	5634.8	5302.1	5223.7	5228.0	6013.2
70°	3834.1	3877.5	4436.5	5787.1	6598.2	6313.3	6241.6	5880.6	5691.3	5480.4	5743.6
72.5°	2929.4	3003.4	3738.3	5073.6	6526.4	7107.1	7087.4	6613.4	5878.2	5032.3	4345.1
75°	991.6	989.6	1963.8	3407.8	5863.1	7350.7	7389.7	6522.1	5128.1	3471.0	2157.3
77.5°	213.1	215.4	404.4	1381.0	3895.1	5902.3	6052.3	4919.3	3307.7	1546.3	493.7
80°	104.5	106.5	167.4	365.4	1557.1	3310.0	3544.8	2529.2	1222.2	308.7	82.6
82.5°	52.2	54.3	87.0	193.6	576.4	1176.5	1257.0	930.9	350.1	174.0	41.3
85°	19.6	19.6	43.5	115.3	263.2	276.1	339.3	269.8	210.9	141.4	10.9
87.5°	4.3	4.3	24.0	56.6	117.5	87.0	87.0	82.6	128.3	95.7	4.3
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: P265822

CATALOG NUMBER: ARCH-M-AF48-110-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9	982.9
2.5°	980.8	972.1	956.9	941.7	930.9	917.8	911.2	904.8	902.4	900.3	904.8
5°	969.9	956.9	928.6	904.8	882.9	865.5	852.5	839.5	832.9	828.5	830.8
7.5°	969.9	950.3	909.1	872.1	837.3	800.3	763.3	735.1	713.3	700.3	702.5
10°	980.8	954.7	900.3	850.3	785.1	706.7	626.3	565.5	524.2	500.1	500.1
12.5°	1004.8	969.9	902.4	824.3	713.3	576.4	454.5	380.6	350.1	332.7	334.9
15°	1037.4	996.0	913.3	789.4	613.3	428.4	317.6	269.8	269.8	274.1	276.1
17.5°	1074.4	1028.6	922.1	737.1	484.9	306.6	250.1	245.7	252.2	263.2	263.2
20°	1111.4	1061.3	926.4	654.5	363.2	243.6	237.1	237.1	241.5	252.2	254.4
22.5°	1156.9	1102.6	922.1	552.4	271.8	230.5	228.3	228.3	228.3	241.5	241.5
25°	1204.7	1150.4	904.8	443.7	230.5	221.8	219.6	217.5	217.5	228.3	230.5
27.5°	1259.2	1200.5	863.5	339.3	217.5	213.1	210.9	206.6	206.6	215.4	215.4
30°	1313.5	1257.0	800.3	256.6	206.6	204.5	200.1	195.7	191.3	200.1	200.1
32.5°	1372.3	1315.7	717.7	204.5	191.3	191.3	189.3	182.6	178.4	182.6	184.8
35°	1450.6	1383.1	624.1	178.4	171.8	171.8	171.8	169.6	160.9	165.3	165.3
37.5°	1555.0	1476.6	515.4	165.3	156.6	152.3	152.3	152.3	145.7	148.0	148.0
40°	1687.6	1585.4	411.1	154.4	145.7	134.8	130.4	132.7	128.3	128.3	126.1
42.5°	1868.1	1702.8	308.7	145.7	137.0	121.8	113.0	110.9	106.5	104.5	104.5
45°	2126.8	1846.3	221.8	137.0	130.4	106.5	97.8	91.4	80.5	73.9	73.9
47.5°	2461.8	2009.5	165.3	128.3	124.0	93.6	82.6	69.6	54.3	50.0	50.0
50°	2870.7	2192.1	139.1	115.3	113.0	82.6	65.2	45.6	30.5	26.1	28.2
52.5°	3268.7	2363.9	124.0	102.1	100.0	71.8	47.8	24.0	13.0	13.0	13.0
55°	3603.6	2485.7	113.0	91.4	87.0	56.6	26.1	10.9	6.5	6.5	6.5
57.5°	3905.8	2555.3	102.1	80.5	69.6	39.2	10.9	4.3	4.3	2.2	2.2
60°	4182.0	2596.6	89.1	69.6	54.3	21.7	4.3	2.2	2.2	0.0	0.0
62.5°	4453.8	2627.2	76.1	56.6	41.3	8.8	2.2	2.2	0.0	0.0	0.0
65°	4660.4	2616.3	60.8	45.6	26.1	4.3	2.2	0.0	0.0	0.0	0.0
67.5°	4653.9	2468.4	45.6	34.9	13.0	2.2	0.0	0.0	0.0	0.0	0.0
70°	4162.4	2079.0	30.5	21.7	4.3	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	2953.3	1333.2	19.6	13.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	1300.4	404.4	10.9	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	254.4	93.6	6.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	60.8	10.9	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.1	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	2.2	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)