

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: P214919

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214919
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-AF16-30-D-U-T4W-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2586.1 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 32
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

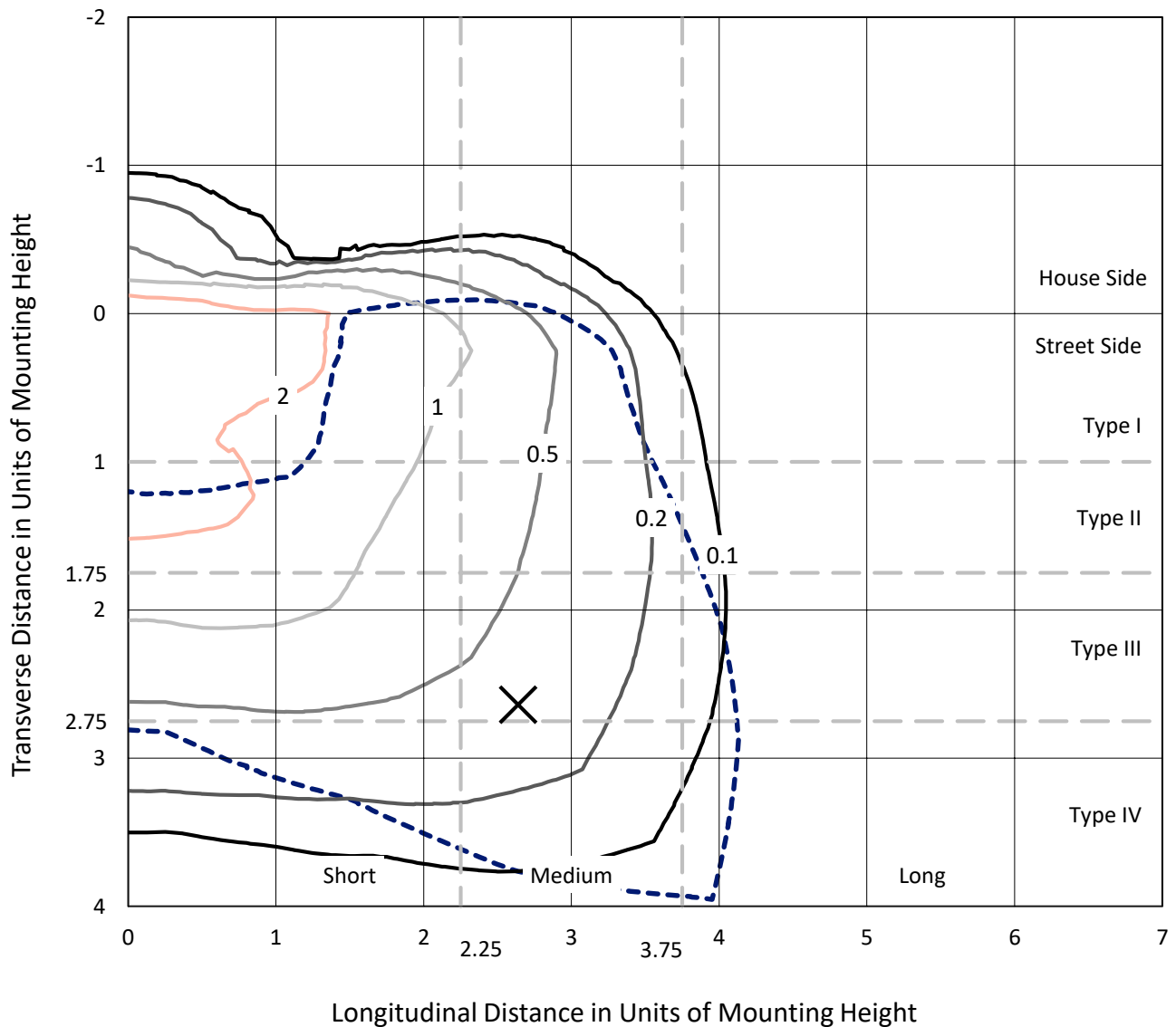


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

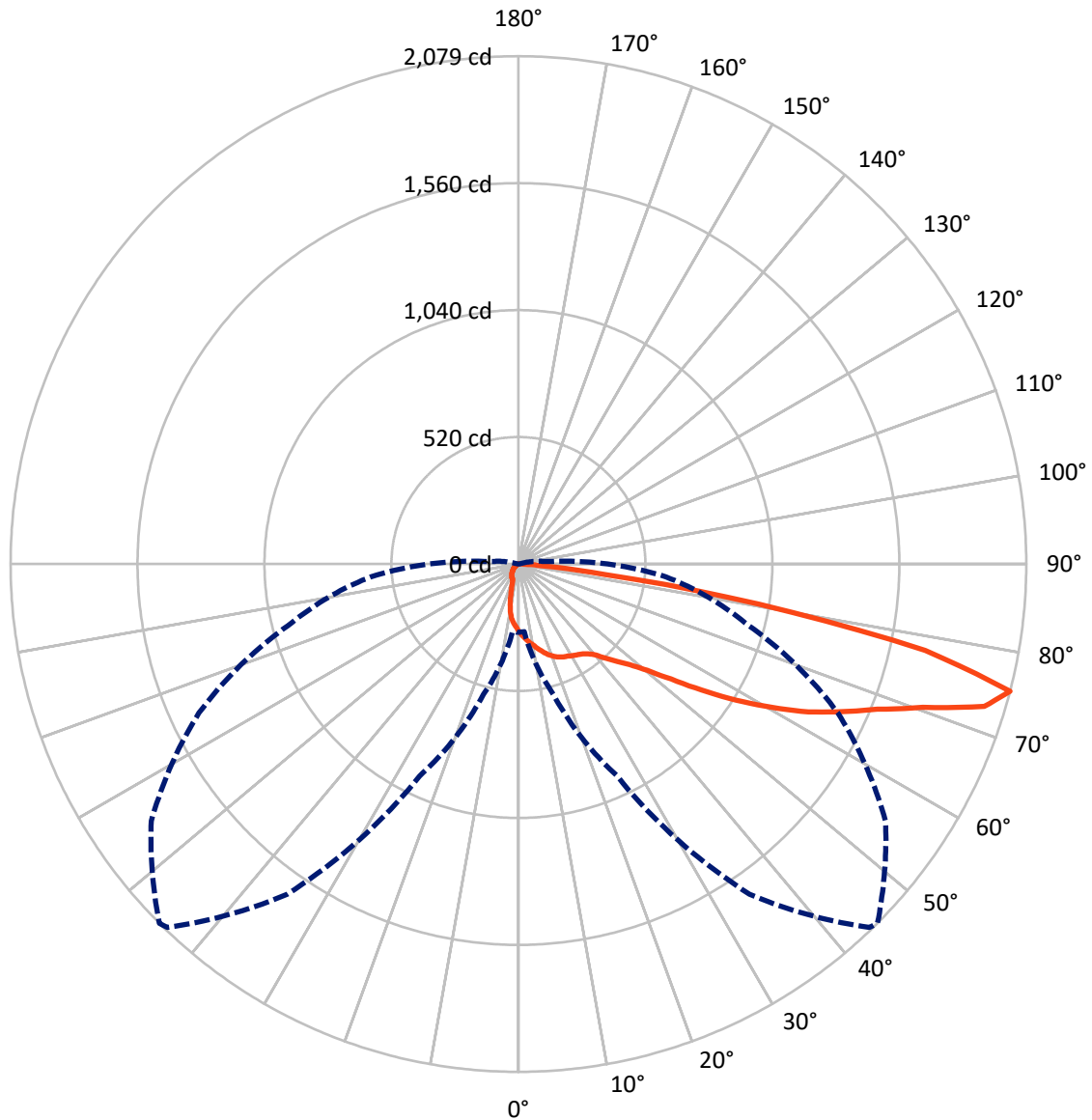


Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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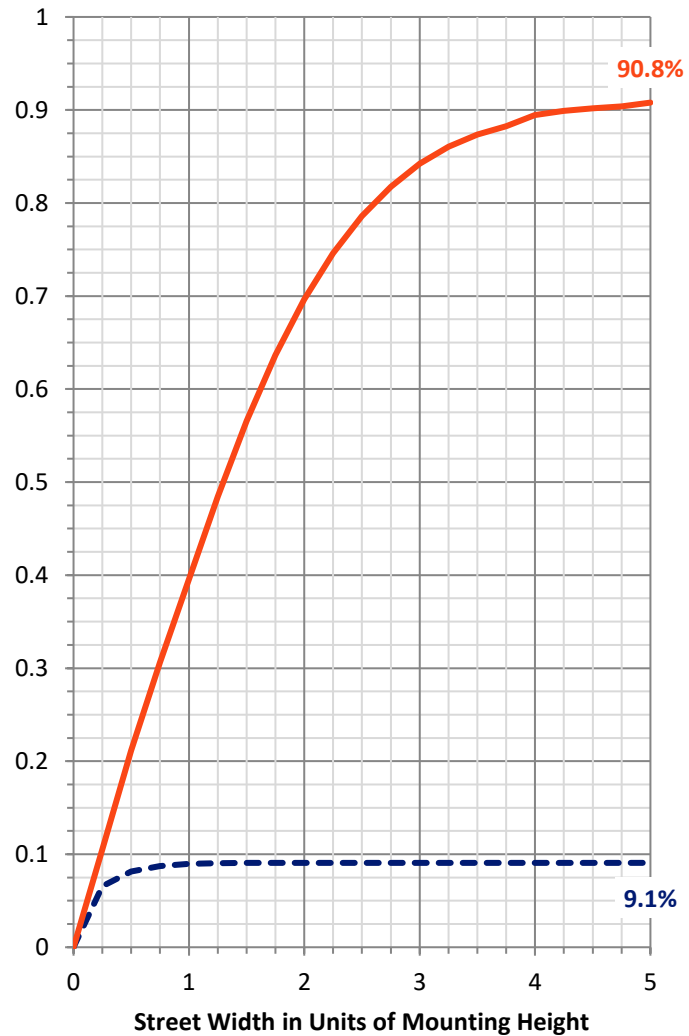
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	236.5	0.0	236.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2349.6	0.0	2349.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	2586.1	0.0	2586.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	1.0
10°-20°	74.0	2.9
20°-30°	122.5	4.7
30°-40°	177.3	6.9
40°-50°	290.3	11.2
50°-60°	517.2	20.0
60°-70°	760.3	29.4
70°-80°	573.6	22.2
80°-90°	45.0	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°	2586.1	100.0
0°-180°	2586.1	100.0



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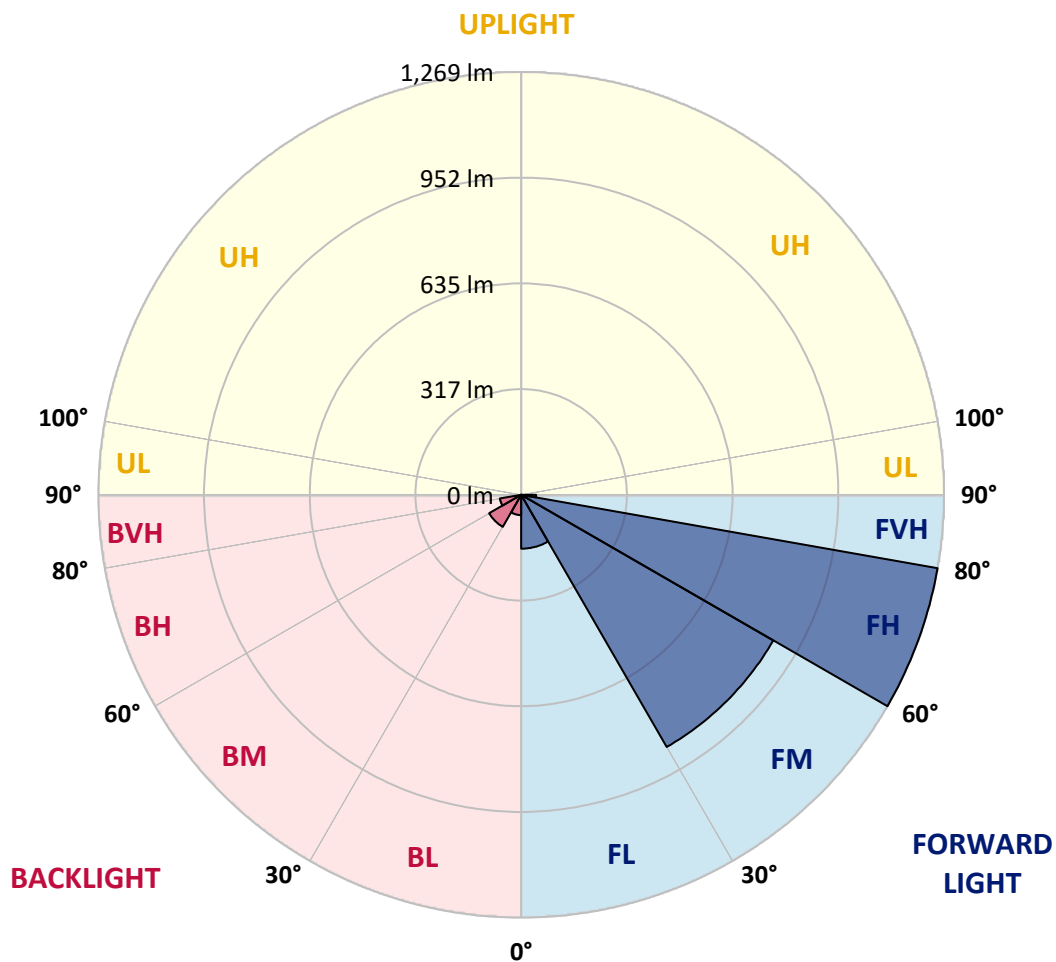
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	161.8	6.3			
FM	(30°-60°)	873.8	33.8			
FH	(60°-80°)	1269.1	49.1			G1/1800
FVH	(80°-90°)	44.9	1.7			G1/100
BL	(0°-30°)	60.8	2.4	B0/110		
BM	(30°-60°)	110.8	4.3	B0/220		
BH	(60°-80°)	64.8	2.5	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7
2.5°	300.5	300.5	299.8	299.3	296.2	293.2	292.5	290.6	285.1	281.5	277.8
5°	325.6	326.1	324.9	321.9	315.1	308.4	307.8	302.8	292.5	285.1	277.2
7.5°	349.4	350.6	347.6	342.1	334.2	324.4	323.7	314.5	301.1	290.6	279.0
10°	369.7	369.7	365.4	358.6	350.0	339.7	338.3	328.0	312.7	299.8	284.5
12.5°	391.7	391.0	384.9	375.8	365.9	356.1	355.5	342.7	328.0	311.5	292.5
15°	411.8	410.6	402.6	394.1	383.7	373.3	372.7	359.8	344.5	324.9	304.2
17.5°	422.9	422.3	414.8	406.3	397.8	389.8	389.2	375.8	359.3	339.0	315.8
20°	424.7	425.3	419.2	411.8	407.0	402.6	402.6	390.4	372.7	351.3	328.0
22.5°	425.3	427.1	422.9	413.1	411.8	412.5	413.6	403.9	385.5	365.4	340.9
25°	429.6	432.0	429.0	417.4	416.2	420.4	421.6	417.4	400.9	380.7	355.5
27.5°	438.1	440.7	438.1	423.5	421.6	425.9	427.1	429.6	417.4	395.3	370.8
30°	455.3	455.9	450.3	432.0	428.4	433.9	435.7	442.4	432.6	409.4	385.5
32.5°	485.3	479.2	462.6	438.1	435.1	441.2	443.0	450.3	446.8	422.9	400.9
35°	546.6	514.6	476.7	446.8	443.7	449.8	452.3	462.6	464.5	441.9	419.8
37.5°	545.9	517.2	509.8	463.3	459.0	463.3	466.3	479.2	486.5	467.0	447.3
40°	584.4	572.2	572.2	494.5	480.4	486.5	489.6	502.4	515.2	500.0	479.7
42.5°	705.6	697.6	689.1	554.4	510.4	527.5	529.4	537.3	552.7	547.7	523.8
45°	840.9	833.5	800.5	656.0	561.8	564.9	569.1	582.1	603.9	613.2	585.1
47.5°	946.7	939.3	911.2	778.4	641.9	615.0	615.0	640.1	674.3	697.6	670.8
50°	1031.7	1023.2	1006.1	908.7	773.5	687.2	683.5	712.9	763.7	799.8	781.4
52.5°	1114.3	1089.4	1078.8	1043.4	922.2	791.9	782.1	802.8	873.3	917.9	902.6
55°	1169.4	1165.8	1154.8	1167.0	1078.3	919.2	910.5	914.8	1003.0	1032.9	1014.0
57.5°	1220.9	1220.2	1244.7	1301.6	1248.4	1064.8	1051.3	1044.6	1128.4	1121.1	1137.6
60°	1284.5	1273.5	1330.3	1411.7	1404.4	1206.8	1191.5	1178.1	1224.6	1203.7	1285.8
62.5°	1287.5	1284.5	1400.1	1517.1	1559.2	1351.2	1333.4	1285.1	1308.4	1284.5	1427.0
65°	1170.7	1186.0	1429.5	1572.7	1689.0	1477.8	1456.4	1381.1	1383.0	1367.2	1593.5
67.5°	1144.4	1152.3	1348.8	1632.7	1782.7	1605.8	1585.6	1491.9	1470.0	1471.1	1692.1
70°	1078.8	1091.2	1248.4	1628.4	1856.7	1776.5	1756.4	1654.7	1601.5	1542.0	1616.2
72.5°	824.3	845.1	1051.9	1427.7	1836.4	1999.9	1994.4	1861.0	1654.0	1416.1	1222.7
75°	279.0	278.4	552.7	959.0	1649.9	2068.4	2079.4	1835.2	1443.0	976.7	607.1
77.5°	60.0	60.5	113.8	388.6	1096.0	1660.8	1703.1	1384.2	930.8	435.1	138.9
80°	29.4	29.9	47.1	102.8	438.1	931.4	997.5	711.8	343.9	86.9	23.3
82.5°	14.6	15.3	24.5	54.4	162.1	331.0	353.7	261.9	98.6	48.9	11.6
85°	5.5	5.5	12.2	32.4	74.1	77.7	95.5	75.9	59.3	39.8	3.1
87.5°	1.2	1.2	6.8	16.0	33.0	24.5	24.5	23.3	36.0	26.9	1.2
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°	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7	276.7
2.5°	276.0	273.5	269.3	265.0	261.9	258.3	256.4	254.6	253.9	253.4	254.6
5°	272.9	269.3	261.3	254.6	248.4	243.5	240.0	236.2	234.4	233.2	233.9
7.5°	272.9	267.4	255.7	245.4	235.6	225.2	214.8	206.8	200.7	197.1	197.6
10°	276.0	268.7	253.4	239.3	220.9	198.9	176.2	159.1	147.5	140.7	140.7
12.5°	282.8	272.9	253.9	231.9	200.7	162.1	128.0	107.1	98.6	93.6	94.3
15°	291.9	280.2	257.0	222.2	172.5	120.5	89.4	75.9	75.9	77.1	77.7
17.5°	302.3	289.4	259.5	207.5	136.5	86.4	70.4	69.2	71.0	74.1	74.1
20°	312.7	298.6	260.7	184.2	102.1	68.5	66.7	66.7	68.0	71.0	71.6
22.5°	325.6	310.3	259.5	155.4	76.5	64.9	64.3	64.3	64.3	68.0	68.0
25°	339.0	323.7	254.6	124.9	64.9	62.4	61.8	61.1	61.1	64.3	64.9
27.5°	354.3	337.8	243.0	95.5	61.1	60.0	59.3	58.1	58.1	60.5	60.5
30°	369.7	353.7	225.2	72.2	58.1	57.5	56.3	55.0	53.9	56.3	56.3
32.5°	386.1	370.3	201.9	57.5	53.9	53.9	53.2	51.4	50.1	51.4	52.0
35°	408.2	389.2	175.6	50.1	48.3	48.3	48.3	47.7	45.3	46.6	46.6
37.5°	437.6	415.5	145.0	46.6	44.0	42.8	42.8	42.8	41.0	41.6	41.6
40°	474.8	446.1	115.7	43.4	41.0	37.9	36.7	37.3	36.0	36.0	35.5
42.5°	525.6	479.2	86.9	41.0	38.6	34.3	31.8	31.2	29.9	29.4	29.4
45°	598.5	519.5	62.4	38.6	36.7	29.9	27.6	25.6	22.6	20.8	20.8
47.5°	692.7	565.4	46.6	36.0	34.9	26.3	23.3	19.5	15.3	14.1	14.1
50°	807.8	616.9	39.2	32.4	31.8	23.3	18.3	12.9	8.5	7.3	7.9
52.5°	919.8	665.2	34.9	28.7	28.2	20.2	13.4	6.8	3.8	3.8	3.8
55°	1014.0	699.5	31.8	25.6	24.5	16.0	7.3	3.1	1.8	1.8	1.8
57.5°	1099.0	719.0	28.7	22.6	19.5	11.0	3.1	1.2	1.2	0.6	0.6
60°	1176.8	730.7	25.1	19.5	15.3	6.1	1.2	0.6	0.6	0.0	0.0
62.5°	1253.3	739.2	21.5	16.0	11.6	2.4	0.6	0.6	0.0	0.0	0.0
65°	1311.4	736.2	17.2	12.9	7.3	1.2	0.6	0.0	0.0	0.0	0.0
67.5°	1309.6	694.6	12.9	9.9	3.8	0.6	0.0	0.0	0.0	0.0	0.0
70°	1171.3	585.1	8.5	6.1	1.2	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	831.0	375.1	5.5	3.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	365.9	113.8	3.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	71.6	26.3	1.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.2	3.1	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	0.6	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)