

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: P265881

Luminaire Tested: **ARCH-AF16-30-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265881
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-AF16-30-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2236.8 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 32
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

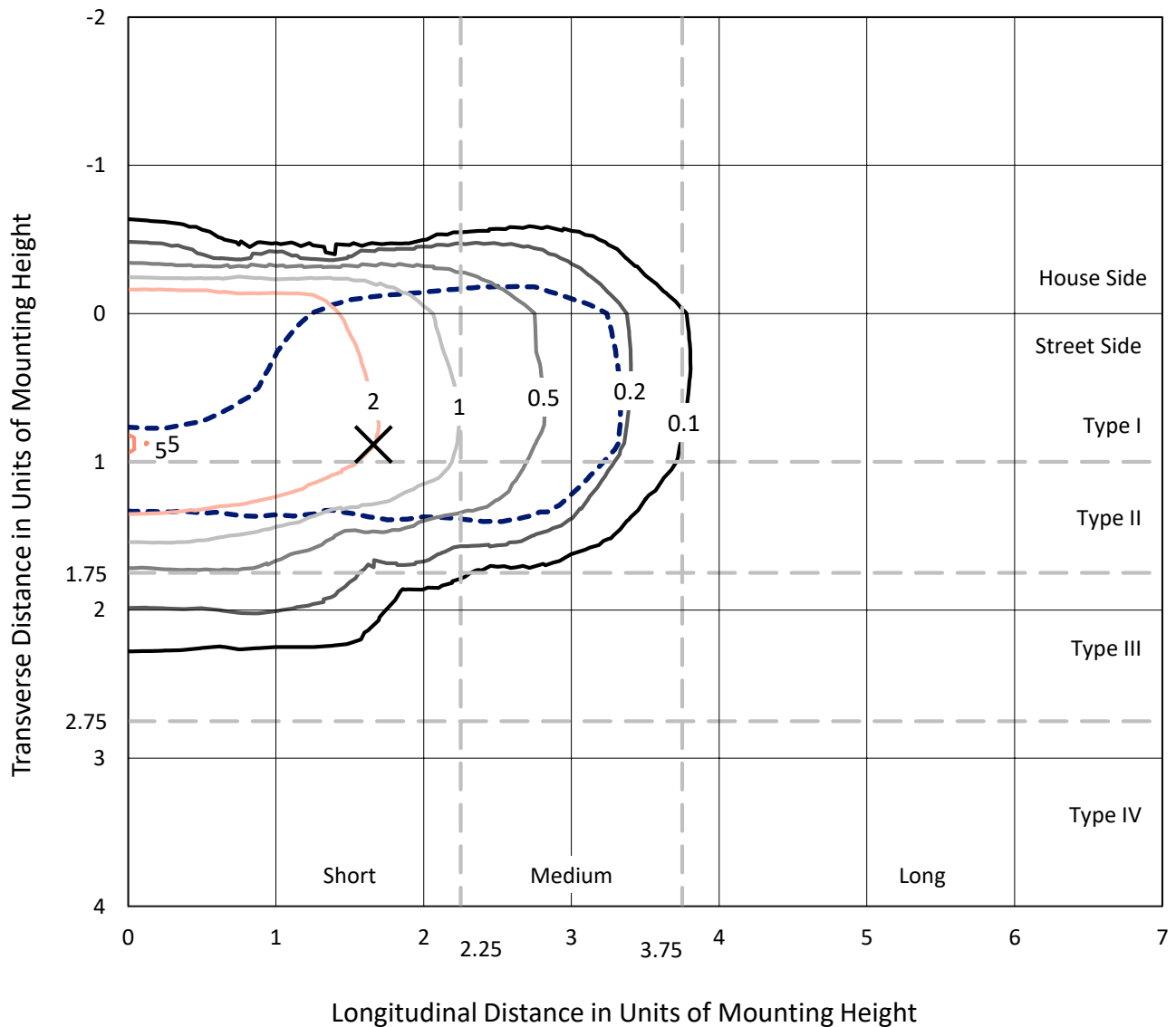


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

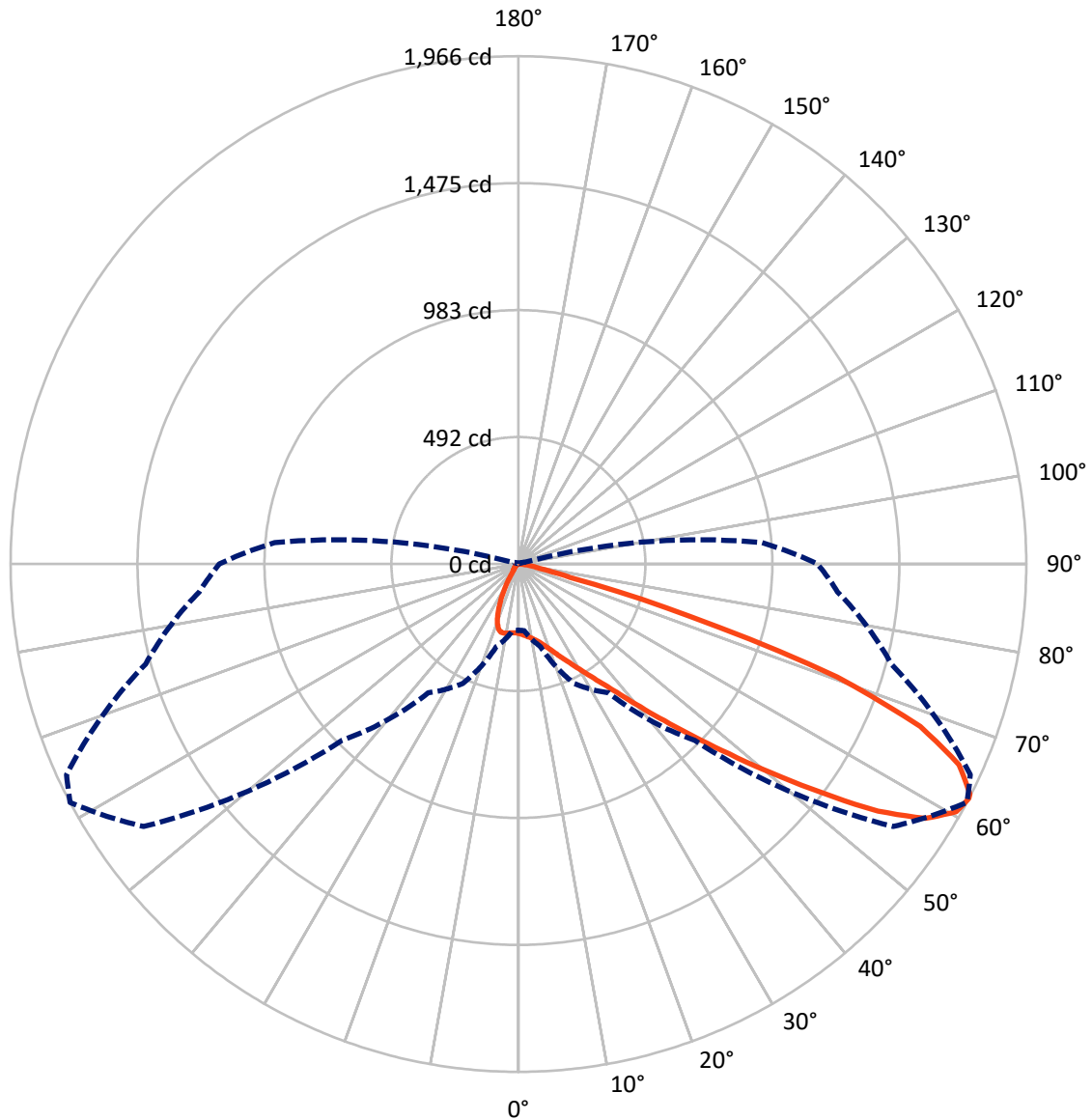


Based on 10 foot mounting height. Maximum calculated value = 5.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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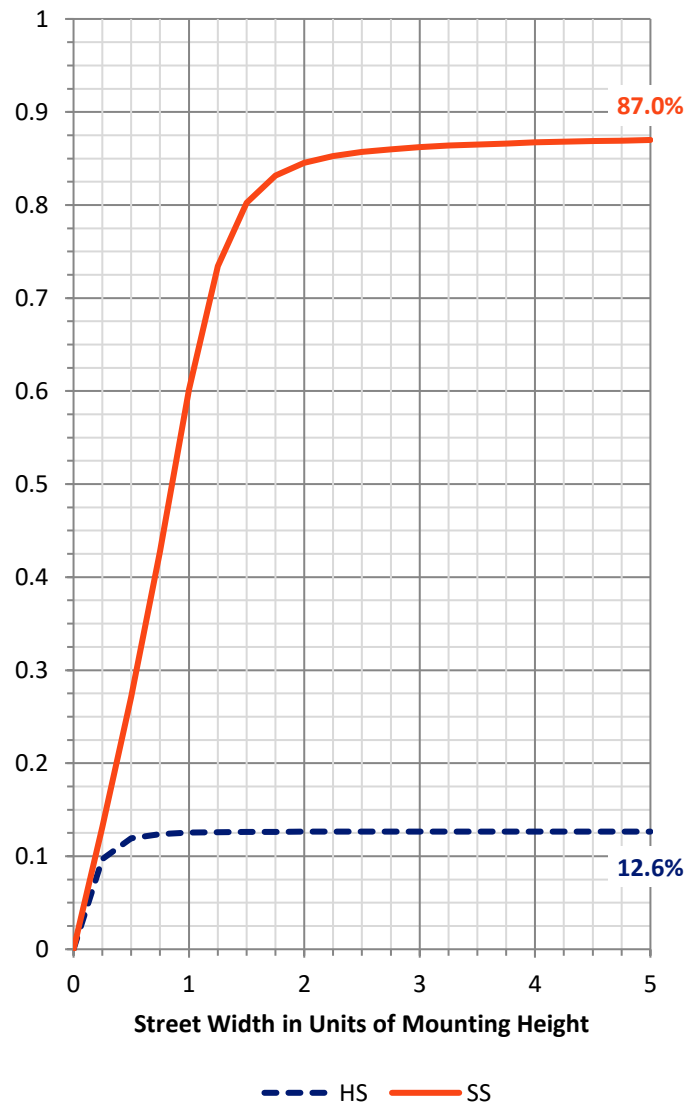
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	286.0	0.0	286.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	1950.8	0.0	1950.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	2236.8	0.0	2236.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.9	1.2
10°-20°	72.4	3.2
20°-30°	121.6	5.4
30°-40°	233.1	10.4
40°-50°	476.2	21.3
50°-60°	630.1	28.2
60°-70°	489.5	21.9
70°-80°	176.7	7.9
80°-90°	11.3	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°	2236.8	100.0
0°-180°	2236.8	100.0

Coefficient of Utilization



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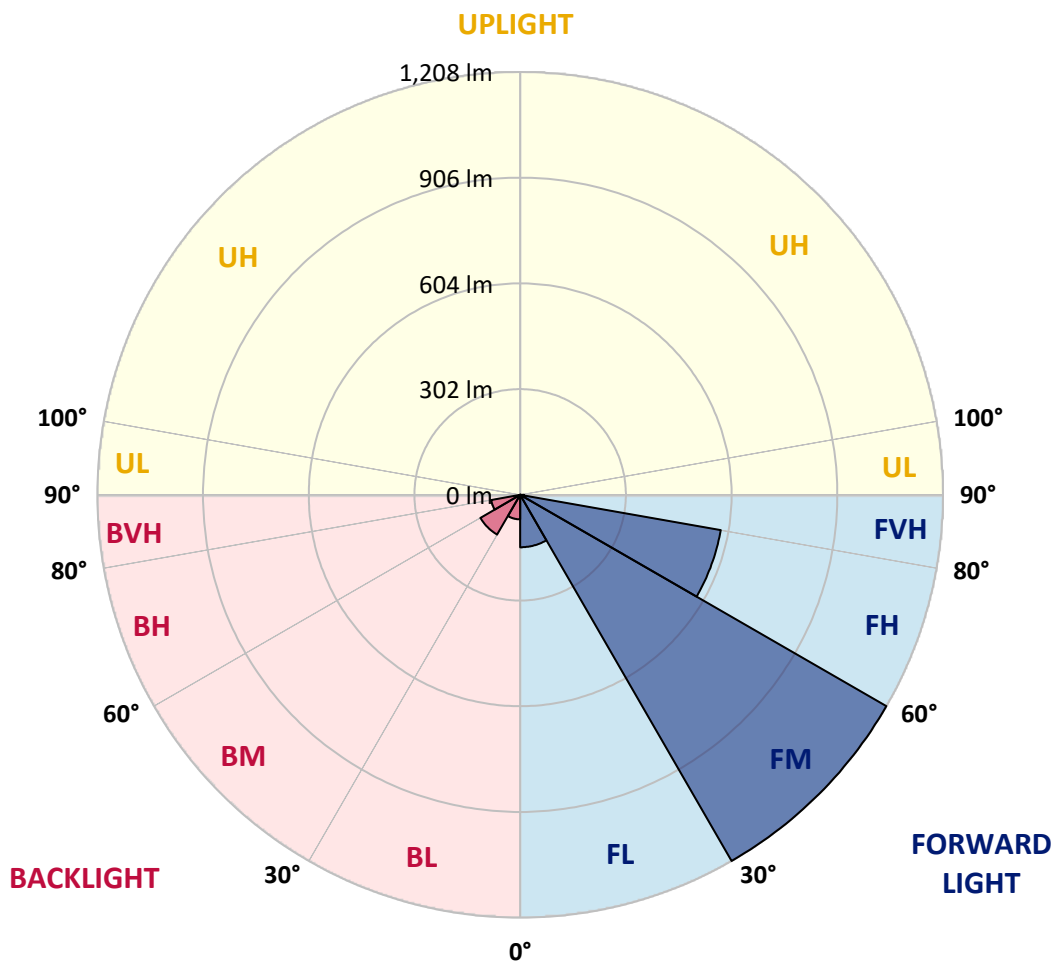
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	150.0	6.7			
FM	(30°-60°)	1208.1	54.0			
FH	(60°-80°)	582.0	26.0			G0/660
FVH	(80°-90°)	10.8	0.5			G1/100
BL	(0°-30°)	70.0	3.1	B0/110		
BM	(30°-60°)	131.3	5.9	B0/220		
BH	(60°-80°)	84.2	3.8	B0/110		G0/110
BVH	(80°-90°)	0.5	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4
2.5°	276.6	276.0	275.5	274.9	274.9	274.4	273.9	272.7	271.6	270.6	270.0
5°	281.6	281.0	280.5	281.0	280.5	280.5	279.9	278.8	277.7	276.0	274.4
7.5°	285.4	284.9	284.4	284.9	285.4	285.9	286.5	285.4	284.9	282.6	281.0
10°	290.3	289.9	289.3	290.3	290.3	293.0	293.7	293.0	292.6	291.0	288.1
12.5°	297.5	298.1	298.1	299.1	300.3	303.5	304.6	303.0	303.0	300.8	297.5
15°	310.8	310.8	310.8	311.8	312.3	316.7	317.8	316.3	317.3	313.5	310.2
17.5°	323.3	323.8	324.9	327.3	327.3	331.0	333.2	333.2	335.4	330.4	326.1
20°	336.0	336.5	338.2	343.2	343.2	348.2	352.0	353.7	355.8	350.9	343.2
22.5°	349.7	349.7	352.4	360.2	358.6	368.5	375.6	378.4	380.5	374.0	361.8
25°	370.6	368.5	370.6	377.7	376.7	390.5	403.6	406.4	409.1	401.5	383.2
27.5°	410.3	406.9	399.2	399.7	399.7	415.7	434.4	438.3	439.9	433.3	410.7
30°	489.3	489.3	460.8	441.5	428.9	443.3	469.6	476.2	478.3	468.6	438.8
32.5°	627.5	627.5	574.6	525.7	477.9	477.9	508.1	520.2	522.5	510.9	476.2
35°	803.4	802.2	723.1	656.0	562.6	527.3	553.1	573.6	580.1	564.8	524.6
37.5°	990.4	983.3	897.9	821.1	692.9	606.5	614.3	641.2	647.1	634.7	587.3
40°	1142.1	1133.9	1065.2	1000.8	861.1	732.9	702.2	727.0	734.2	716.5	662.1
42.5°	1279.6	1259.2	1212.0	1165.8	1054.7	951.8	819.3	829.2	837.0	818.3	746.2
45°	1379.2	1347.7	1323.7	1309.3	1250.5	1192.2	971.1	951.3	954.1	931.0	838.1
47.5°	1382.0	1359.9	1362.1	1399.5	1423.8	1421.5	1168.5	1098.2	1087.7	1049.2	935.9
50°	1249.9	1262.6	1302.7	1409.4	1540.2	1619.5	1403.3	1271.9	1240.6	1171.3	1033.3
52.5°	1029.9	1049.8	1125.0	1304.9	1557.3	1749.8	1647.0	1470.4	1414.3	1292.2	1108.1
55°	806.7	807.8	886.9	1070.2	1443.4	1773.4	1841.6	1688.8	1602.9	1384.1	1157.6
57.5°	554.9	585.1	685.8	809.0	1186.8	1655.8	1914.7	1858.1	1747.7	1440.7	1192.2
60°	363.5	365.2	482.3	624.7	807.8	1347.3	1870.2	1947.7	1864.7	1474.3	1215.9
62°	256.2	259.0	331.6	510.2	608.7	965.6	1771.7	1966.4	1930.6	1494.2	1240.6
62.5°	237.5	239.8	300.8	481.8	572.0	866.1	1736.7	1962.1	1940.6	1500.7	1249.4
65°	174.4	174.4	196.9	331.0	419.0	467.9	1471.6	1874.7	1927.5	1553.4	1282.4
67.5°	134.7	135.9	143.5	204.1	316.3	283.8	939.3	1677.8	1790.0	1631.5	1301.0
70°	116.1	115.5	121.0	135.3	228.2	188.6	413.5	1309.3	1499.0	1611.7	1283.9
72.5°	85.8	86.3	99.0	118.8	158.9	122.6	186.9	695.1	972.2	1261.5	1100.3
75°	54.9	55.5	69.9	93.5	114.4	80.3	107.7	207.2	398.0	699.5	673.1
77.5°	36.8	38.0	45.6	65.4	100.2	50.0	67.6	86.9	119.8	262.3	241.5
80°	24.8	24.8	29.1	43.9	63.2	41.9	36.3	57.8	62.2	81.3	40.8
82.5°	16.4	16.4	19.3	29.1	41.2	37.4	22.0	31.4	36.3	40.8	14.4
85°	9.9	9.9	13.1	18.1	26.9	20.9	14.4	17.5	18.7	25.8	7.6
87.5°	6.1	5.5	8.9	12.7	14.4	12.7	9.3	9.3	9.9	14.4	3.9
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°	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4	269.4
2.5°	269.0	268.4	267.9	266.6	265.1	263.9	262.8	261.8	260.7	260.7	262.3
5°	273.9	272.1	270.0	267.9	264.6	262.3	260.7	258.4	257.4	257.4	258.0
7.5°	279.9	278.3	274.4	270.6	265.5	261.8	258.0	253.0	249.1	247.5	249.1
10°	286.5	284.4	278.8	272.7	267.2	257.4	244.7	229.2	216.1	210.1	212.8
12.5°	294.7	291.9	285.4	277.1	264.6	240.2	208.9	173.3	150.6	140.2	142.4
15°	306.9	303.0	293.7	281.0	253.0	200.7	149.6	108.3	87.5	78.6	79.7
17.5°	321.1	316.3	303.5	279.9	223.3	144.6	89.1	63.2	54.4	52.2	52.2
20°	336.5	329.9	313.5	271.6	178.1	90.6	55.5	48.4	45.0	43.5	43.5
22.5°	352.4	343.7	321.8	252.5	127.0	56.7	45.6	40.8	36.8	35.3	35.3
25°	371.7	360.2	329.9	218.8	80.8	45.6	39.0	34.0	30.3	28.0	28.6
27.5°	394.3	379.4	337.0	177.1	52.2	39.5	32.5	27.5	24.3	23.0	23.0
30°	417.9	400.4	338.8	132.5	42.3	34.0	26.9	22.5	20.3	19.3	19.3
32.5°	450.4	427.2	333.8	87.9	35.8	28.6	22.5	18.7	17.1	16.4	16.4
35°	493.3	462.4	322.2	54.4	30.3	23.6	18.7	16.4	14.8	14.4	14.4
37.5°	547.6	511.5	301.9	37.4	25.8	19.3	15.9	14.4	13.1	12.7	12.7
40°	620.3	570.9	275.5	32.5	22.0	16.4	13.7	12.7	11.6	11.6	11.6
42.5°	697.3	642.8	241.5	28.6	18.7	14.4	12.0	11.0	10.4	9.9	9.9
45°	781.4	716.5	199.1	25.3	15.9	12.7	11.0	9.3	8.9	8.9	8.9
47.5°	865.0	792.5	152.9	22.0	13.7	11.0	9.3	8.3	7.6	7.1	7.1
50°	950.8	861.1	112.2	19.3	12.0	9.9	8.3	7.1	6.1	5.5	5.5
52.5°	1012.8	902.3	81.9	16.4	10.4	8.3	6.6	5.5	4.4	3.9	3.9
55°	1058.6	927.7	59.9	13.7	9.3	7.1	5.5	4.4	3.4	3.4	2.8
57.5°	1094.2	939.7	45.0	12.0	8.3	6.1	4.4	3.4	2.8	2.2	2.2
60°	1121.9	940.3	33.5	9.9	7.1	4.9	3.4	2.2	1.6	1.6	1.6
62°	1158.0	947.5	27.5	8.3	6.6	4.4	2.8	1.6	1.1	0.5	0.5
62.5°	1168.5	950.2	26.4	8.3	6.1	3.9	2.2	1.6	1.1	0.5	0.5
65°	1216.9	955.2	20.3	6.6	4.9	3.4	1.6	1.1	0.0	0.0	0.0
67.5°	1261.0	947.5	14.8	4.9	3.9	2.2	1.6	0.5	0.0	0.0	0.0
70°	1256.5	894.7	10.4	3.4	2.8	1.6	1.1	0.0	0.0	0.0	0.0
72.5°	1035.4	669.7	7.1	2.8	1.6	1.1	0.5	0.0	0.0	0.0	0.0
75°	625.2	293.0	4.9	1.6	1.6	1.1	0.5	0.0	0.0	0.0	0.0
77.5°	205.2	106.1	3.4	1.1	1.1	0.5	0.5	0.0	0.0	0.0	0.0
80°	33.5	17.5	1.6	1.1	1.1	0.5	0.5	0.0	0.0	0.0	0.0
82.5°	10.4	4.4	1.1	1.1	0.5	0.5	0.0	0.0	0.0	0.0	0.0
85°	3.9	1.6	1.1	1.1	0.5	0.5	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	1.1	1.1	1.1	0.5	0.5	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)