

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: P234725

Luminaire Tested: **ARCH-AF16-30-D-U-T3-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234725
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
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-T3-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2110 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-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

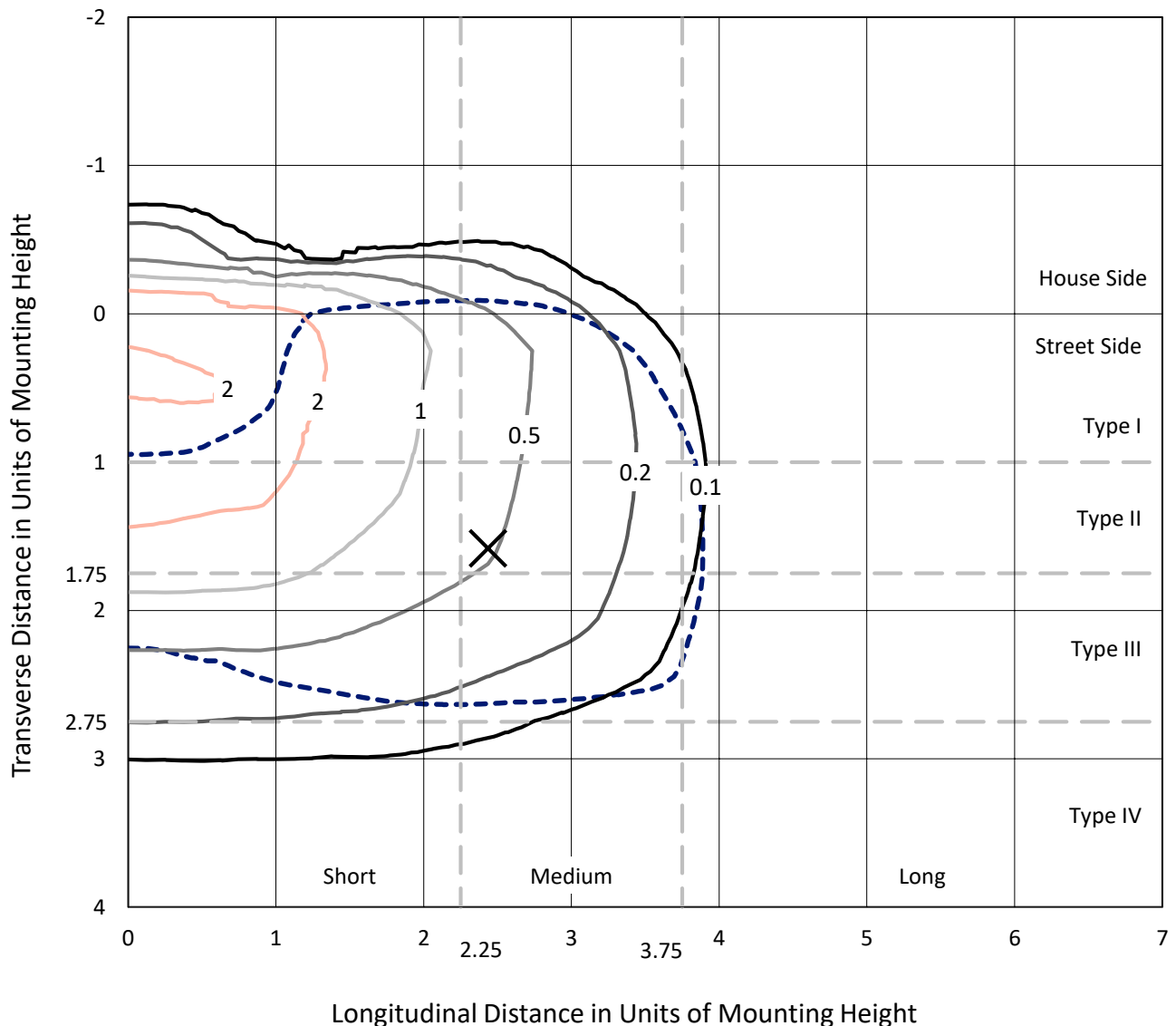


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

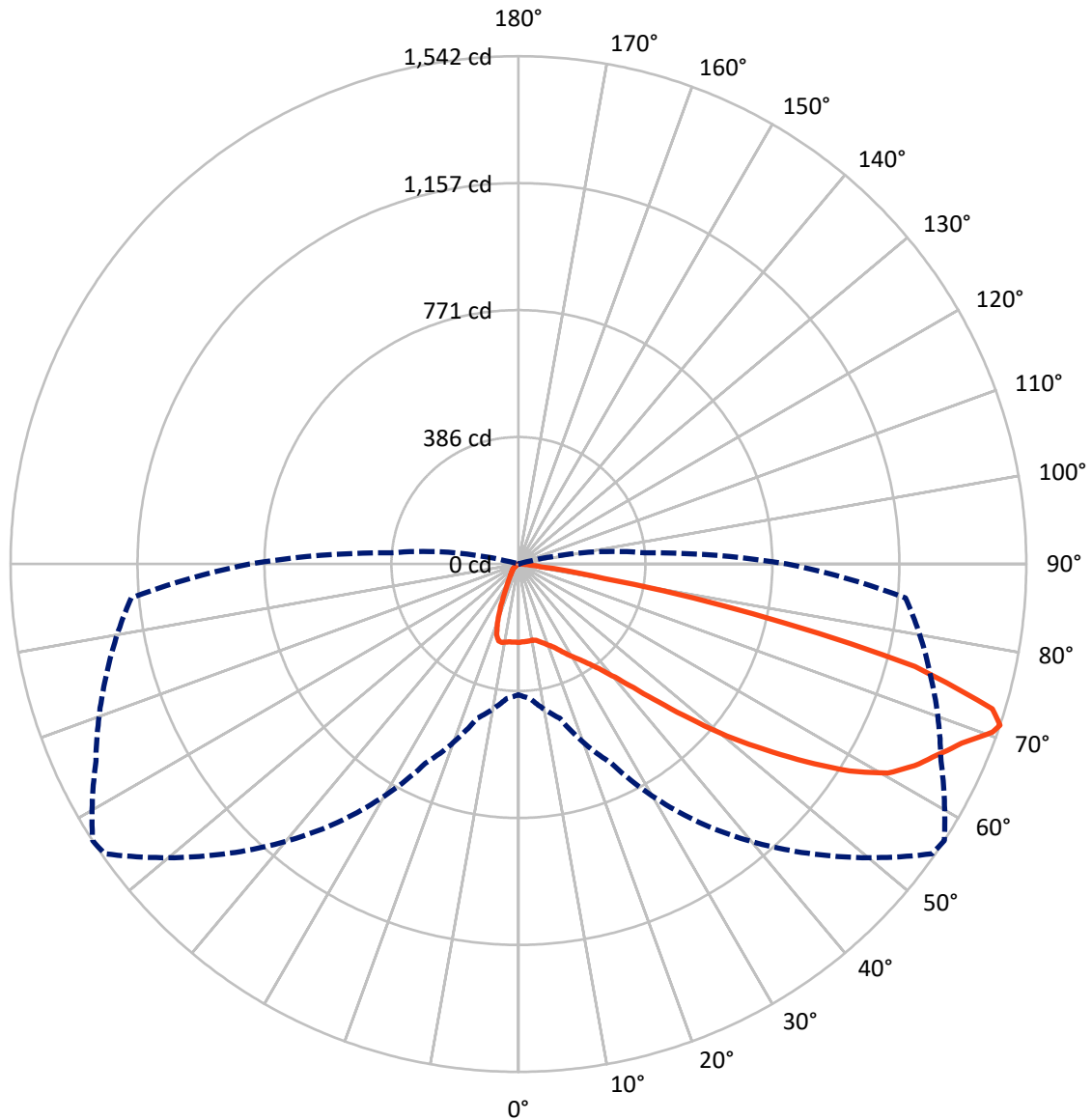


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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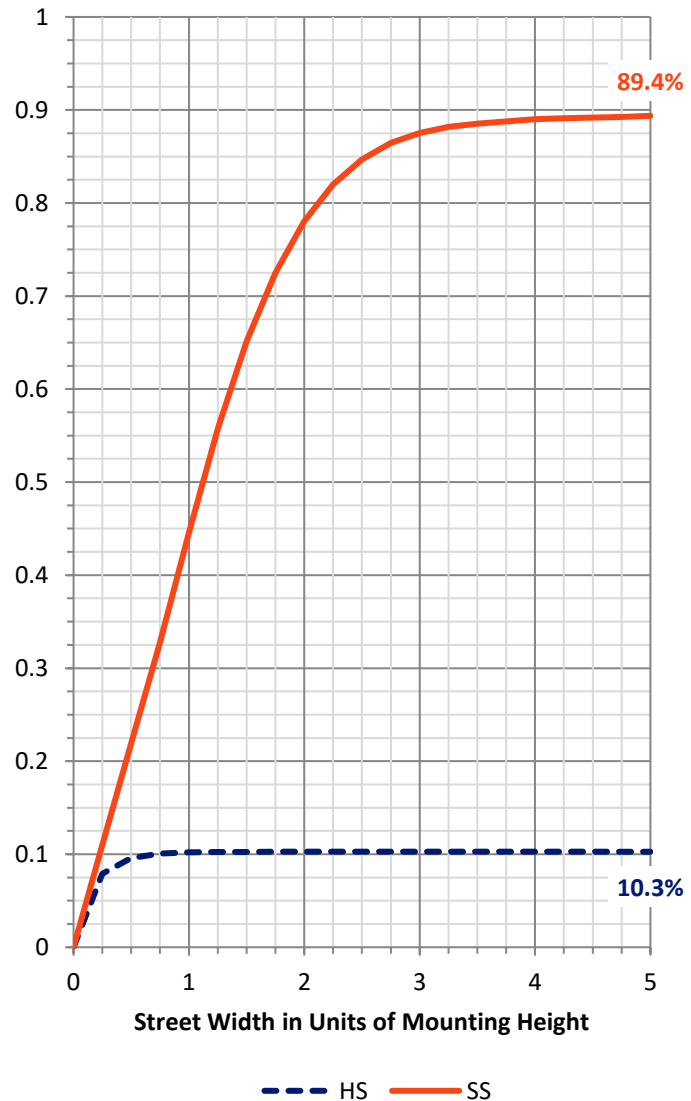
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	218.7	0.0	218.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	1891.3	0.0	1891.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	2110.0	0.0	2110.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	1.1
10°-20°	59.9	2.8
20°-30°	93.4	4.4
30°-40°	157.9	7.5
40°-50°	306.6	14.5
50°-60°	514.9	24.4
60°-70°	614.5	29.1
70°-80°	323.9	15.3
80°-90°	16.5	0.8
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°	2110.0	100.0
0°-180°	2110.0	100.0



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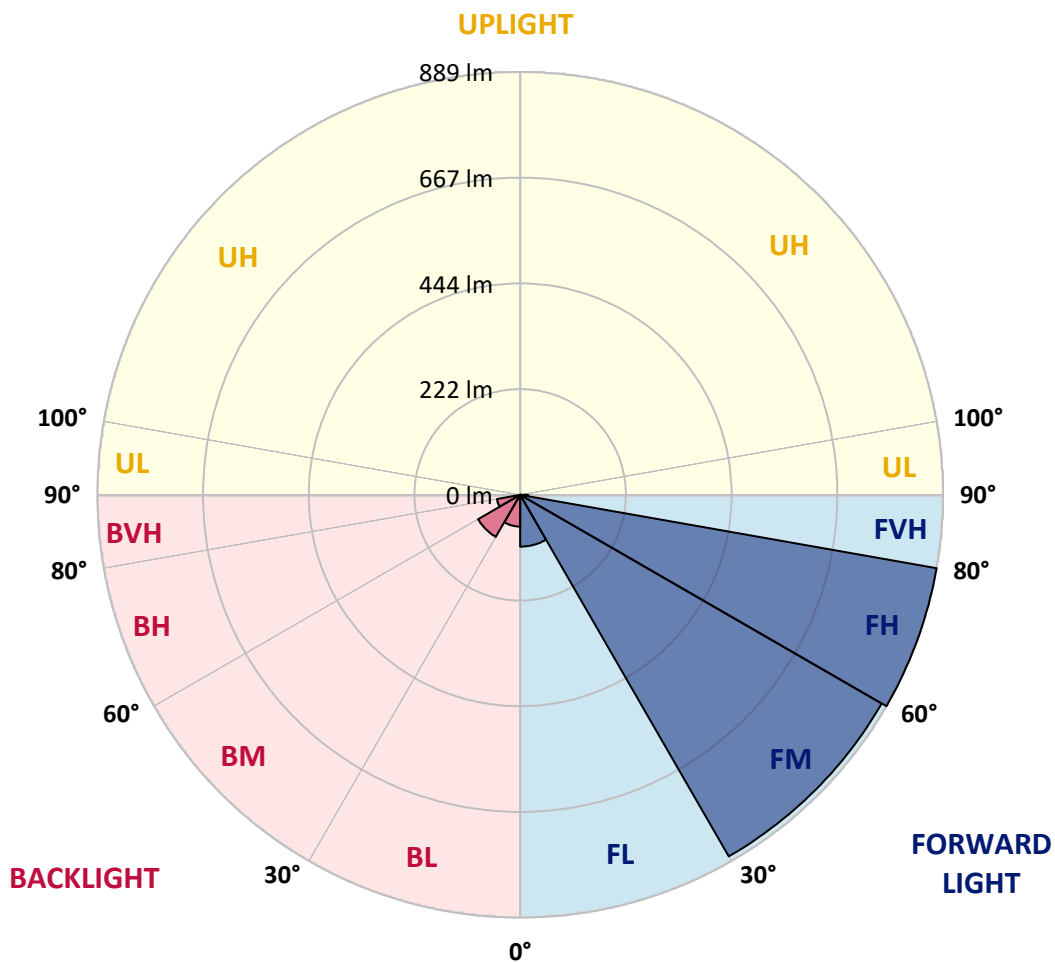
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	108.9	5.2			
FM	(30°-60°)	877.4	41.6			
FH	(60°-80°)	888.7	42.1			G1/1800
FVH	(80°-90°)	16.3	0.8			G1/100
BL	(0°-30°)	66.7	3.2	B0/110		
BM	(30°-60°)	102.1	4.8	B0/220		
BH	(60°-80°)	49.7	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5
2.5°	235.0	235.0	235.0	235.5	236.0	236.0	237.0	236.5	236.5	236.5	237.5
5°	228.6	229.1	229.6	230.6	232.6	234.0	236.5	236.5	237.0	238.0	238.5
7.5°	219.8	220.3	221.7	223.7	227.6	231.1	235.0	236.0	237.5	239.9	240.9
10°	214.4	215.4	217.3	219.8	224.2	228.6	233.5	235.0	239.4	243.9	246.3
12.5°	212.9	213.4	215.4	219.3	224.7	230.1	236.5	238.0	244.4	251.2	255.2
15°	215.4	215.8	216.8	221.3	227.6	234.5	242.9	244.9	252.7	260.6	265.5
17.5°	219.8	219.8	220.8	224.7	231.6	239.4	250.3	253.2	262.1	270.9	276.3
20°	222.7	222.7	224.2	228.1	236.0	246.3	259.1	263.0	272.9	282.7	287.6
22.5°	225.7	226.2	227.6	232.1	240.9	255.2	269.9	273.9	285.2	295.5	300.4
25°	234.0	233.5	234.0	238.0	248.3	266.0	284.7	289.6	301.4	312.7	315.2
27.5°	257.1	256.2	249.8	247.3	255.2	277.3	303.4	308.3	322.0	333.4	333.4
30°	310.2	308.3	292.5	272.4	266.0	287.6	321.1	327.9	345.6	355.5	352.5
32.5°	377.6	373.2	353.0	318.6	293.0	301.4	339.7	347.6	370.2	378.6	372.2
35°	451.4	450.9	425.8	381.5	345.2	329.9	363.8	373.2	401.7	409.1	398.7
37.5°	529.5	531.5	514.8	453.8	411.0	376.6	395.8	406.6	441.5	450.4	440.5
40°	616.6	616.1	609.7	537.4	490.2	443.0	442.0	451.8	494.1	507.9	494.1
42.5°	726.7	725.7	702.6	637.7	586.1	529.5	509.4	512.8	560.0	582.6	562.5
45°	838.8	831.9	805.4	749.3	703.6	636.7	598.4	598.4	638.7	669.7	638.2
47.5°	901.2	894.4	883.5	852.6	838.8	764.1	707.5	700.6	732.1	763.6	719.3
50°	983.3	983.3	956.3	944.5	968.1	915.5	828.0	821.1	836.3	861.4	803.4
52.5°	1048.2	1036.4	1017.3	1027.6	1095.0	1070.9	948.4	935.2	947.0	953.4	876.7
55°	1075.3	1064.0	1062.5	1100.4	1204.6	1171.2	1071.8	1060.0	1059.1	1027.6	940.6
57.5°	1080.7	1070.9	1089.6	1155.9	1311.3	1253.3	1194.8	1185.9	1158.4	1079.7	1006.0
60°	1035.0	1039.9	1085.1	1186.4	1374.2	1324.6	1298.5	1289.2	1225.7	1124.0	1078.7
62.5°	941.1	952.9	1037.4	1189.4	1351.1	1353.6	1356.0	1349.6	1277.9	1164.3	1152.0
65°	829.9	833.4	935.2	1148.6	1310.8	1344.7	1398.3	1397.8	1317.7	1209.5	1234.6
67.5°	683.9	689.8	777.8	1010.9	1230.2	1340.8	1453.9	1452.4	1362.9	1261.1	1283.8
70°	508.9	516.3	587.6	786.2	1050.2	1291.6	1526.6	1527.6	1410.6	1300.5	1249.8
71°	396.8	410.1	484.8	667.7	958.3	1242.0	1533.5	1542.4	1416.0	1295.1	1180.0
72.5°	194.7	210.4	304.3	470.0	788.6	1130.9	1488.3	1505.5	1382.1	1227.7	1008.9
75°	50.6	53.6	91.0	192.2	422.8	749.3	1200.2	1243.9	1129.9	934.7	616.6
77.5°	32.0	32.9	42.8	74.7	158.3	284.7	705.1	726.7	645.6	473.5	217.3
80°	22.6	23.1	27.0	48.2	92.4	83.1	253.7	263.0	233.5	125.4	38.8
82.5°	13.8	13.8	19.7	31.0	57.0	45.2	66.9	71.3	62.9	34.9	12.8
85°	7.9	8.4	12.3	21.1	27.0	22.1	25.1	26.6	27.0	23.1	5.4
87.5°	6.4	6.9	10.8	17.7	14.8	10.8	10.8	11.3	11.8	13.8	2.5
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°	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5	238.5
2.5°	237.5	237.5	238.0	237.5	237.5	237.5	238.0	238.0	238.0	239.0	239.4
5°	238.5	238.5	238.5	238.0	237.5	237.5	238.5	239.0	239.0	240.4	240.4
7.5°	240.9	240.9	239.9	239.0	238.0	236.5	237.0	237.5	237.0	237.5	237.5
10°	246.3	246.3	244.9	242.9	239.9	235.5	229.6	222.2	215.4	212.9	211.9
12.5°	255.2	254.7	251.7	248.3	241.9	226.7	204.5	178.5	156.8	150.9	149.0
15°	265.0	264.0	260.6	254.7	237.5	197.2	150.9	117.5	96.9	91.9	91.0
17.5°	275.3	273.9	268.9	257.1	217.3	146.5	97.4	73.8	62.4	61.5	62.0
20°	286.2	284.2	277.3	252.2	175.5	97.8	62.9	57.0	56.1	56.1	56.5
22.5°	298.4	296.0	286.6	234.5	127.8	64.9	54.1	53.6	53.1	52.6	52.6
25°	312.7	309.8	295.5	202.6	88.0	53.1	51.6	50.2	49.2	48.2	47.7
27.5°	329.9	326.0	302.4	163.2	60.5	49.7	48.7	46.2	44.3	42.3	42.3
30°	347.1	342.2	300.4	122.9	49.2	46.2	44.3	41.3	38.4	36.4	35.9
32.5°	365.3	360.4	287.6	82.6	44.7	42.3	39.8	35.4	32.0	29.5	29.0
35°	392.4	388.4	262.6	54.6	40.3	37.4	33.9	29.5	25.1	22.6	22.1
37.5°	432.7	427.8	231.6	41.8	35.4	31.0	28.0	23.1	18.7	16.2	15.7
40°	486.8	472.0	194.7	36.9	31.0	25.6	21.6	16.7	13.3	11.8	11.8
42.5°	549.7	514.8	154.9	33.4	27.5	21.1	15.7	11.3	9.3	8.9	8.9
45°	616.6	554.6	115.1	31.0	24.1	16.7	11.3	7.9	6.9	6.4	6.4
47.5°	685.4	587.1	80.1	28.0	20.2	12.8	7.9	5.9	4.9	4.4	4.4
50°	749.8	608.2	56.5	25.1	17.2	9.3	5.9	4.4	3.4	3.4	3.4
52.5°	794.5	606.2	40.8	21.6	13.3	6.4	3.9	3.0	3.0	3.0	3.0
55°	833.9	598.9	32.0	18.7	10.3	4.4	3.0	2.5	2.5	2.0	2.0
57.5°	867.3	587.1	27.0	15.2	7.4	3.4	2.0	2.0	1.5	1.5	1.5
60°	895.8	572.3	22.6	12.8	4.9	2.5	1.5	1.0	1.0	0.5	1.0
62.5°	934.7	563.0	19.7	9.8	3.4	1.5	1.0	0.5	0.5	0.0	0.0
65°	963.2	545.3	16.7	6.9	2.0	1.0	0.5	0.5	0.0	0.0	0.0
67.5°	964.2	513.3	12.3	3.9	1.5	1.0	0.5	0.0	0.0	0.0	0.0
70°	886.5	437.6	7.9	2.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
71°	815.2	387.4	6.4	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	671.6	284.7	4.9	1.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75°	370.2	103.3	2.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	118.5	31.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	20.2	4.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.9	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)