

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: P214951

Luminaire Tested: **ARCH-AF24-20-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214951
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-AF24-20-D-U-T4W-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 260mA LIGHT ENGINE 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: 2002 lumens
Efficiency: N/A
Efficacy: 95.3 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): 21
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

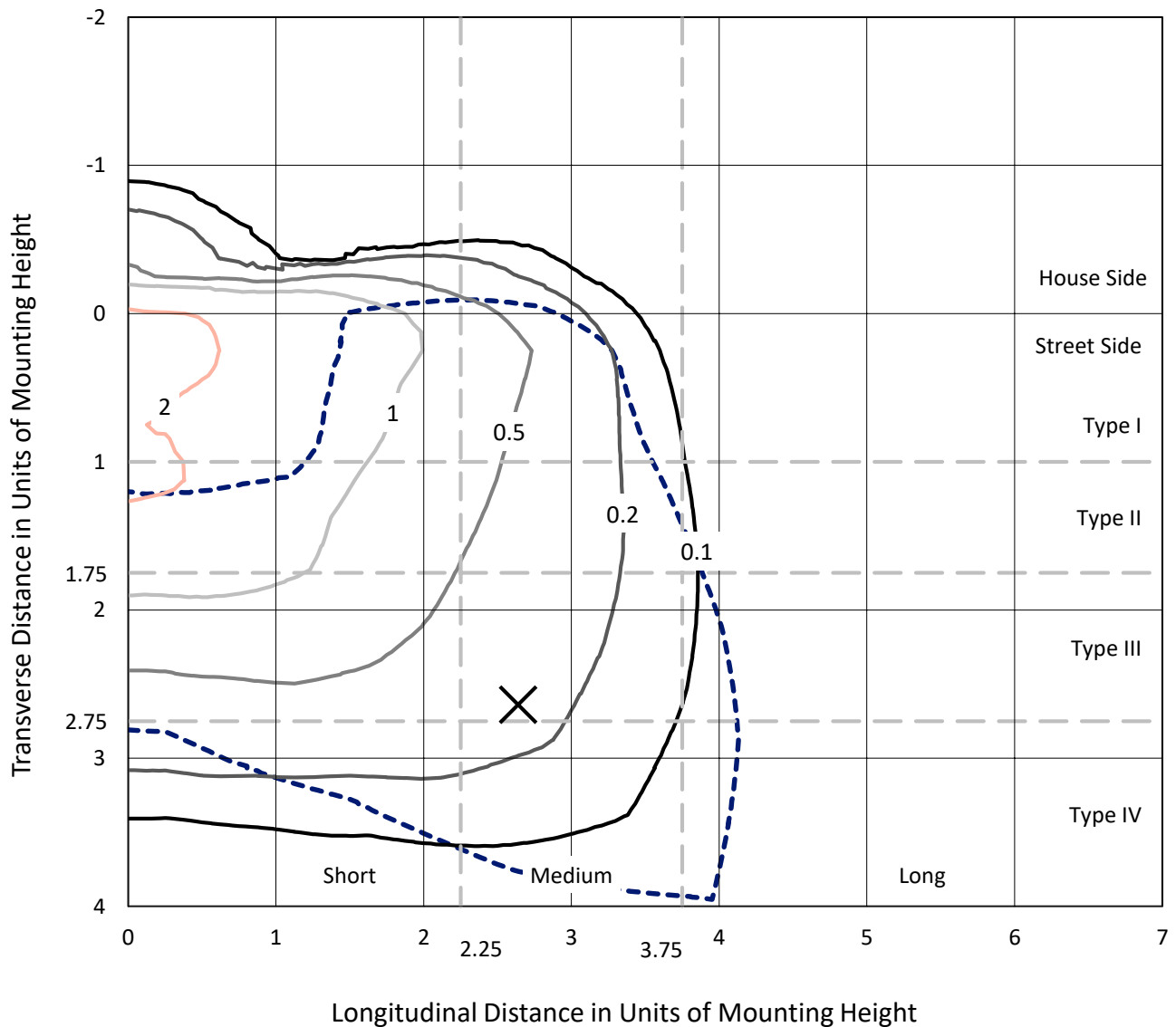


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

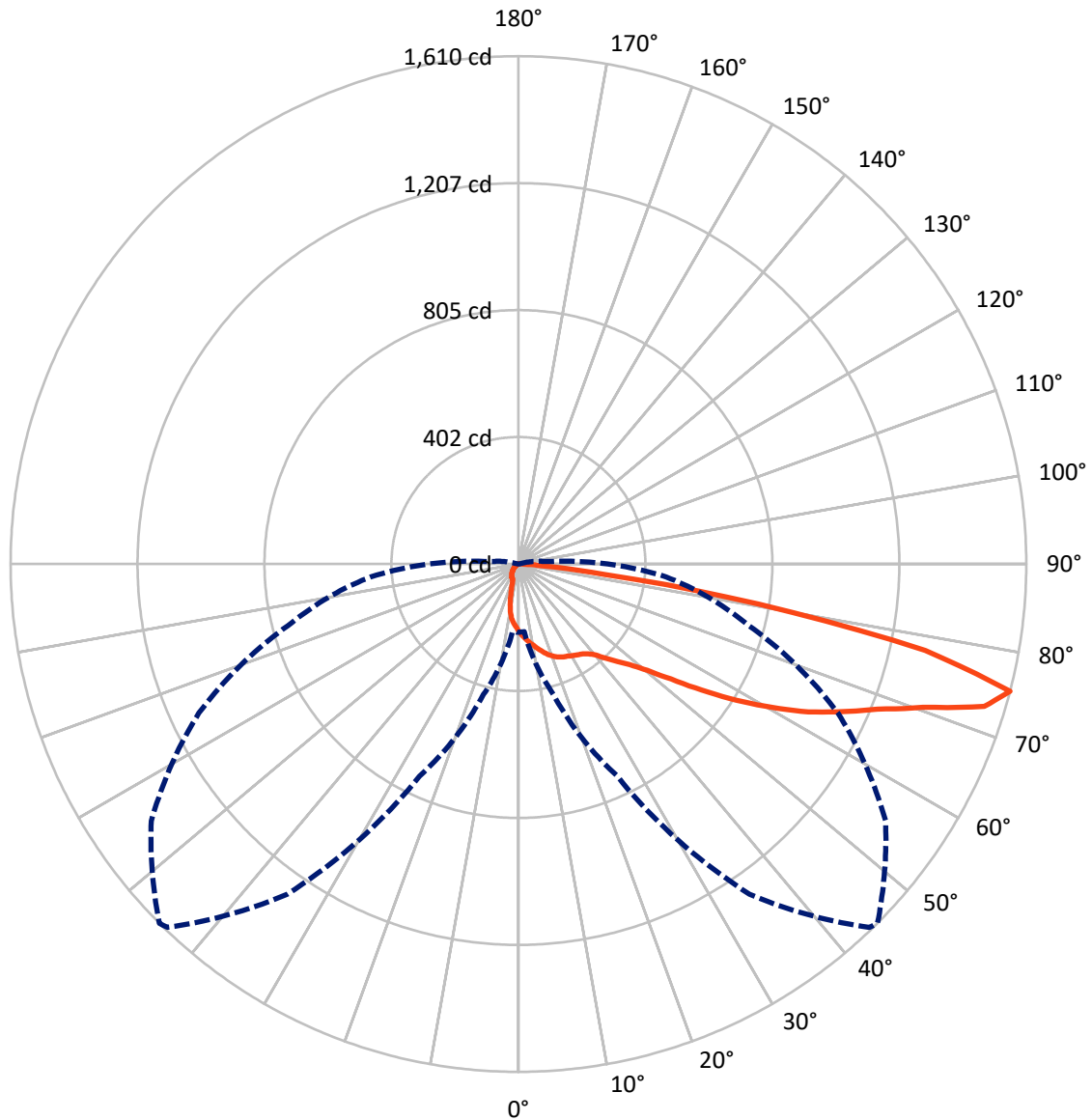


Based on 10 foot mounting height. Maximum calculated value = 2.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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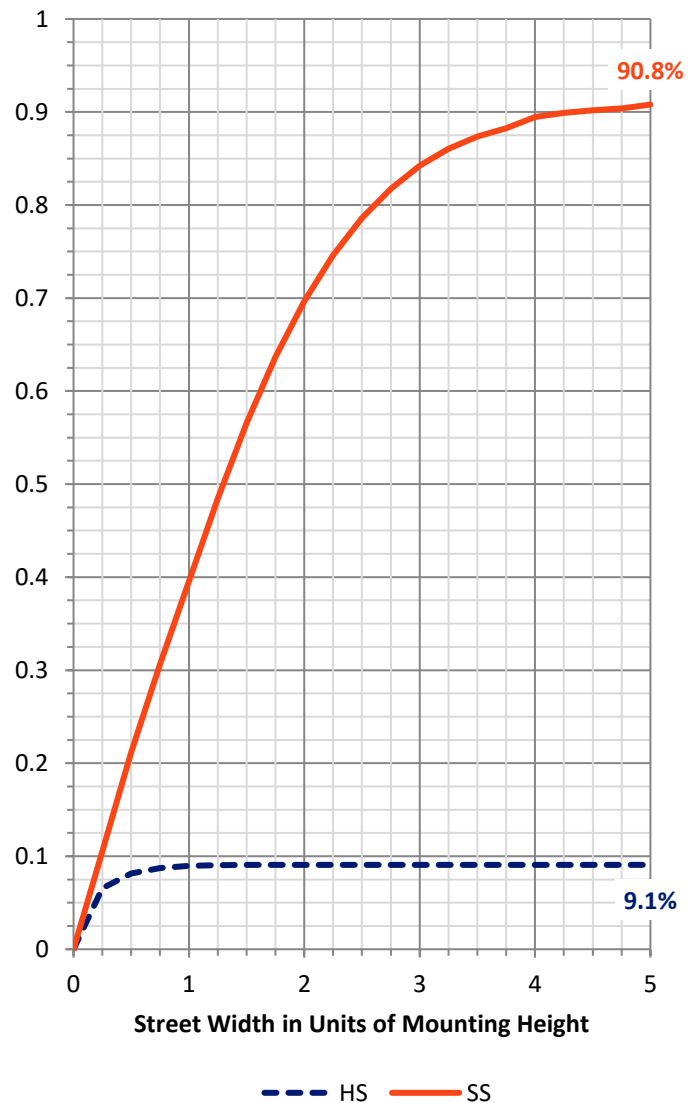
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	183.1	0.0	183.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	1818.9	0.0	1818.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	2002.0	0.0	2002.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.2	1.0
10°-20°	57.3	2.9
20°-30°	94.8	4.7
30°-40°	137.2	6.9
40°-50°	224.7	11.2
50°-60°	400.4	20.0
60°-70°	588.6	29.4
70°-80°	444.0	22.2
80°-90°	34.8	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°	2002.0	100.0
0°-180°	2002.0	100.0

Coefficient of Utilization



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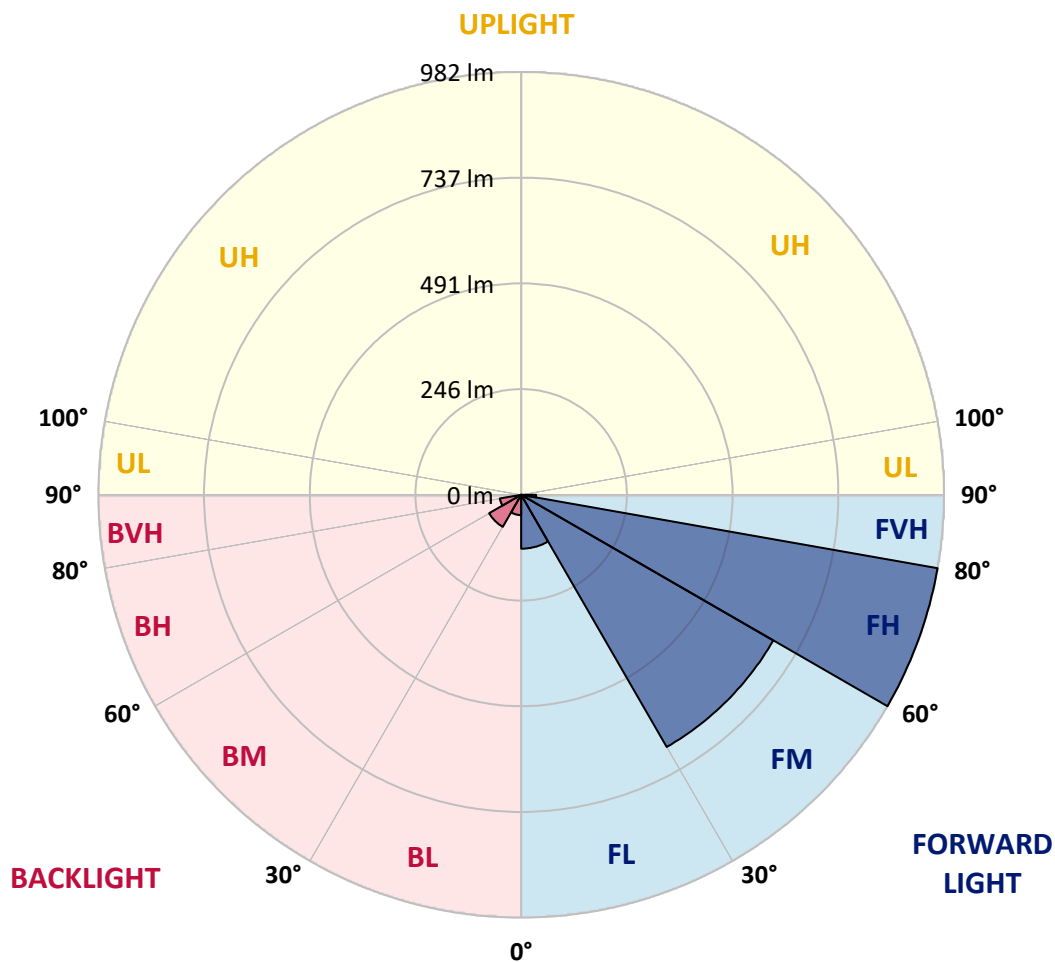
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	125.2	6.3			
FM	(30°-60°)	676.5	33.8			
FH	(60°-80°)	982.5	49.1			G1/1800
FVH	(80°-90°)	34.7	1.7			G1/100
BL	(0°-30°)	47.1	2.4	B0/110		
BM	(30°-60°)	85.8	4.3	B0/220		
BH	(60°-80°)	50.2	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°	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1
2.5°	232.6	232.6	232.1	231.7	229.3	226.9	226.4	225.0	220.8	217.9	215.1
5°	252.0	252.5	251.5	249.2	244.0	238.8	238.3	234.5	226.4	220.8	214.6
7.5°	270.5	271.4	269.1	264.8	258.7	251.1	250.6	243.5	233.1	225.0	216.0
10°	286.1	286.1	282.8	277.6	271.0	262.9	262.0	253.9	242.1	232.1	220.3
12.5°	303.2	302.7	298.0	290.9	283.3	275.7	275.2	265.3	253.9	241.1	226.4
15°	318.8	317.9	311.7	305.1	297.0	289.0	288.5	278.6	266.7	251.5	235.4
17.5°	327.3	326.9	321.2	314.6	307.9	301.8	301.3	290.9	278.1	262.4	244.4
20°	328.8	329.2	324.5	318.8	315.0	311.7	311.7	302.2	288.5	271.9	253.9
22.5°	329.2	330.7	327.3	319.8	318.8	319.3	320.2	312.7	298.4	282.8	263.9
25°	332.6	334.5	332.1	323.1	322.1	325.5	326.4	323.1	310.3	294.7	275.2
27.5°	339.2	341.1	339.2	327.8	326.4	329.7	330.7	332.6	323.1	306.0	287.1
30°	352.5	352.9	348.7	334.5	331.6	335.9	337.3	342.5	334.9	316.9	298.4
32.5°	375.7	370.9	358.1	339.2	336.8	341.6	343.0	348.7	345.8	327.3	310.3
35°	423.0	398.4	369.0	345.8	343.5	348.2	350.1	358.1	359.6	342.0	325.0
37.5°	422.6	400.3	394.6	358.6	355.3	358.6	361.0	370.9	376.6	361.5	346.3
40°	452.4	442.9	442.9	382.8	371.9	376.6	379.0	388.9	398.9	387.0	371.4
42.5°	546.2	540.0	533.4	429.2	395.1	408.4	409.8	415.9	427.8	424.0	405.5
45°	650.9	645.2	619.6	507.8	434.9	437.3	440.6	450.5	467.6	474.7	452.9
47.5°	732.9	727.2	705.4	602.6	496.9	476.1	476.1	495.5	522.0	540.0	519.2
50°	798.7	792.1	778.8	703.5	598.8	532.0	529.2	551.9	591.2	619.2	604.9
52.5°	862.7	843.2	835.2	807.7	713.9	613.0	605.4	621.5	676.0	710.6	698.7
55°	905.3	902.5	893.9	903.4	834.7	711.5	704.9	708.2	776.4	799.7	785.0
57.5°	945.1	944.6	963.6	1007.6	966.4	824.3	813.9	808.7	873.6	867.9	880.7
60°	994.4	985.8	1029.9	1092.9	1087.2	934.2	922.3	911.9	947.9	931.8	995.3
62.5°	996.7	994.4	1083.9	1174.4	1207.1	1046.0	1032.3	994.8	1012.8	994.4	1104.7
65°	906.2	918.1	1106.6	1217.5	1307.5	1144.1	1127.5	1069.2	1070.6	1058.3	1233.6
67.5°	885.9	892.0	1044.1	1263.9	1380.0	1243.1	1227.4	1154.9	1137.9	1138.8	1309.9
70°	835.2	844.7	966.4	1260.6	1437.3	1375.2	1359.6	1281.0	1239.7	1193.8	1251.1
72.5°	638.1	654.2	814.3	1105.2	1421.7	1548.1	1543.9	1440.6	1280.5	1096.2	946.5
75°	216.0	215.5	427.8	742.3	1277.2	1601.2	1609.7	1420.7	1117.0	756.1	469.9
77.5°	46.4	46.9	88.1	300.8	848.4	1285.7	1318.4	1071.6	720.5	336.8	107.5
80°	22.7	23.2	36.5	79.6	339.2	721.0	772.2	550.9	266.2	67.3	18.0
82.5°	11.4	11.8	18.9	42.2	125.5	256.3	273.8	202.8	76.3	37.9	9.0
85°	4.3	4.3	9.5	25.1	57.3	60.2	73.9	58.7	46.0	30.8	2.4
87.5°	0.9	0.9	5.2	12.3	25.6	18.9	18.9	18.0	27.9	20.8	0.9
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°	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1
2.5°	213.7	211.8	208.4	205.1	202.8	199.9	198.5	197.1	196.6	196.1	197.1
5°	211.3	208.4	202.3	197.1	192.3	188.5	185.7	182.9	181.4	180.5	181.0
7.5°	211.3	207.0	198.0	190.0	182.4	174.3	166.3	160.1	155.4	152.5	153.0
10°	213.7	208.0	196.1	185.2	171.0	154.0	136.4	123.2	114.2	109.0	109.0
12.5°	218.9	211.3	196.6	179.5	155.4	125.5	99.0	82.9	76.3	72.5	73.0
15°	226.0	217.0	199.0	172.0	133.6	93.3	69.2	58.7	58.7	59.7	60.2
17.5°	234.0	224.1	200.9	160.6	105.6	66.8	54.5	53.5	55.0	57.3	57.3
20°	242.1	231.2	201.8	142.6	79.1	53.1	51.6	51.6	52.6	55.0	55.4
22.5°	252.0	240.2	200.9	120.3	59.2	50.2	49.7	49.7	49.7	52.6	52.6
25°	262.4	250.6	197.1	96.6	50.2	48.3	47.8	47.4	47.4	49.7	50.2
27.5°	274.3	261.5	188.1	73.9	47.4	46.4	46.0	45.0	45.0	46.9	46.9
30°	286.1	273.8	174.3	55.9	45.0	44.5	43.6	42.6	41.7	43.6	43.6
32.5°	298.9	286.6	156.3	44.5	41.7	41.7	41.2	39.8	38.8	39.8	40.3
35°	316.0	301.3	136.0	38.8	37.4	37.4	37.4	37.0	35.1	36.0	36.0
37.5°	338.7	321.7	112.3	36.0	34.1	33.2	33.2	33.2	31.7	32.2	32.2
40°	367.6	345.3	89.5	33.6	31.7	29.4	28.4	28.9	27.9	27.9	27.5
42.5°	406.9	370.9	67.3	31.7	29.8	26.5	24.6	24.2	23.2	22.7	22.7
45°	463.3	402.2	48.3	29.8	28.4	23.2	21.3	19.9	17.5	16.1	16.1
47.5°	536.3	437.7	36.0	27.9	27.0	20.4	18.0	15.2	11.8	10.9	10.9
50°	625.3	477.5	30.3	25.1	24.6	18.0	14.2	9.9	6.6	5.7	6.2
52.5°	712.0	514.9	27.0	22.3	21.8	15.6	10.4	5.2	2.8	2.8	2.8
55°	785.0	541.5	24.6	19.9	18.9	12.3	5.7	2.4	1.4	1.4	1.4
57.5°	850.8	556.6	22.3	17.5	15.2	8.5	2.4	0.9	0.9	0.5	0.5
60°	911.0	565.6	19.4	15.2	11.8	4.7	0.9	0.5	0.5	0.0	0.0
62.5°	970.2	572.3	16.6	12.3	9.0	1.9	0.5	0.5	0.0	0.0	0.0
65°	1015.2	569.9	13.3	9.9	5.7	0.9	0.5	0.0	0.0	0.0	0.0
67.5°	1013.8	537.7	9.9	7.6	2.8	0.5	0.0	0.0	0.0	0.0	0.0
70°	906.7	452.9	6.6	4.7	0.9	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	643.3	290.4	4.3	2.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	283.3	88.1	2.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	55.4	20.4	1.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	13.3	2.4	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	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)