

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: P234759

Luminaire Tested: **ARCH-AF24-40-D-U-T4W-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234759
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-AF24-40-D-U-T4W-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 500mA 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: 2810 lumens
Efficiency: N/A
Efficacy: 70.2 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): 40
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

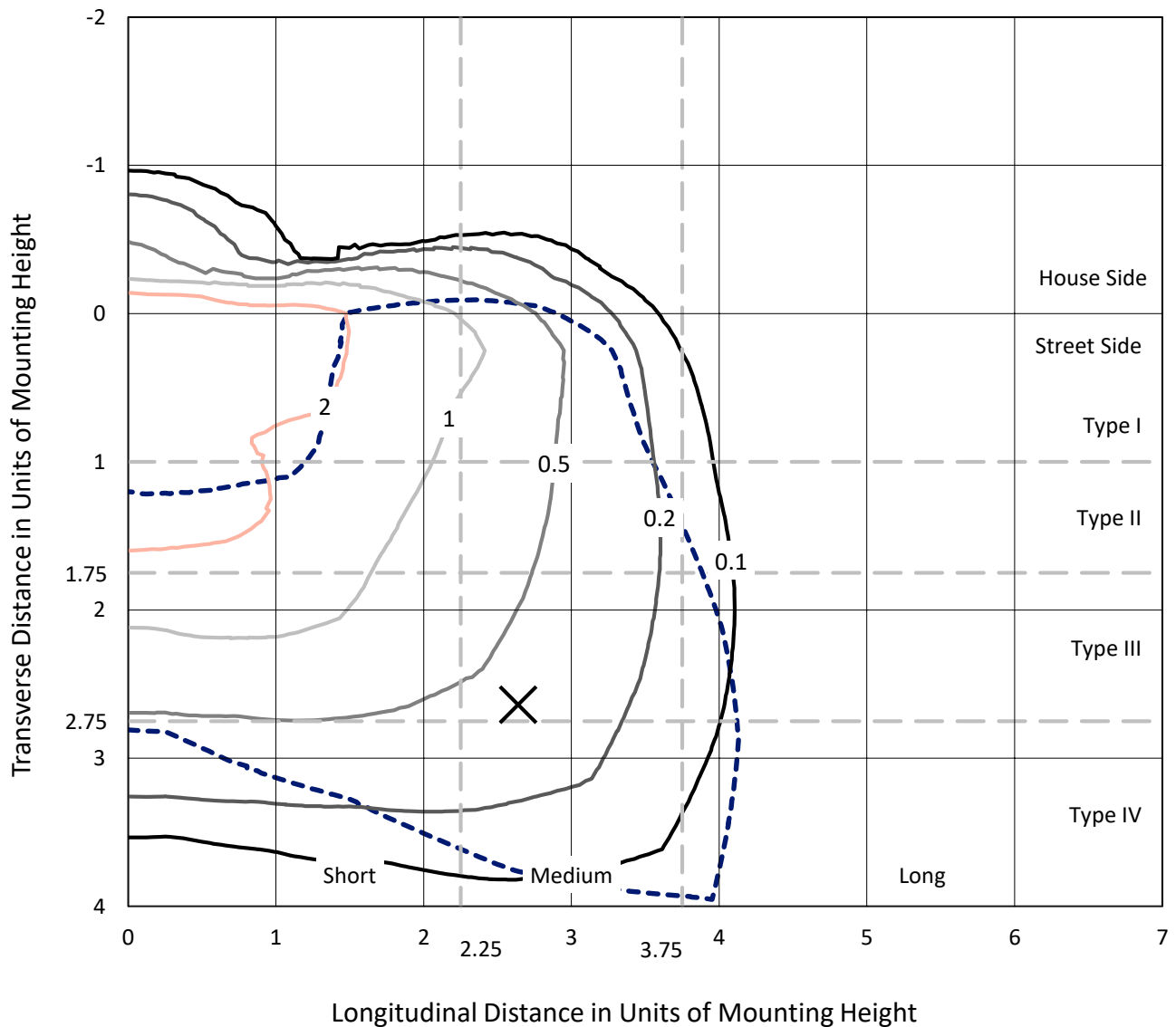


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

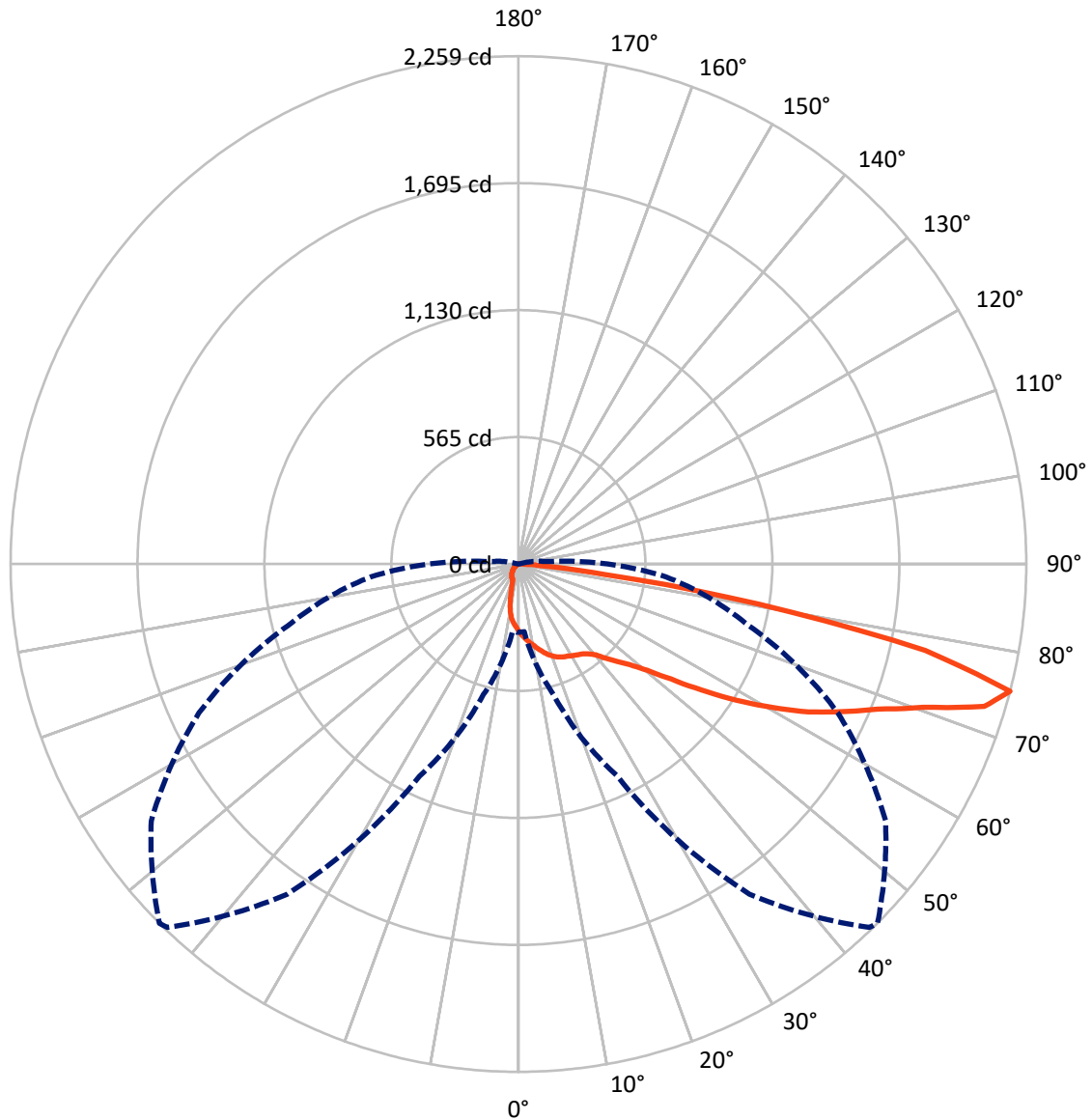


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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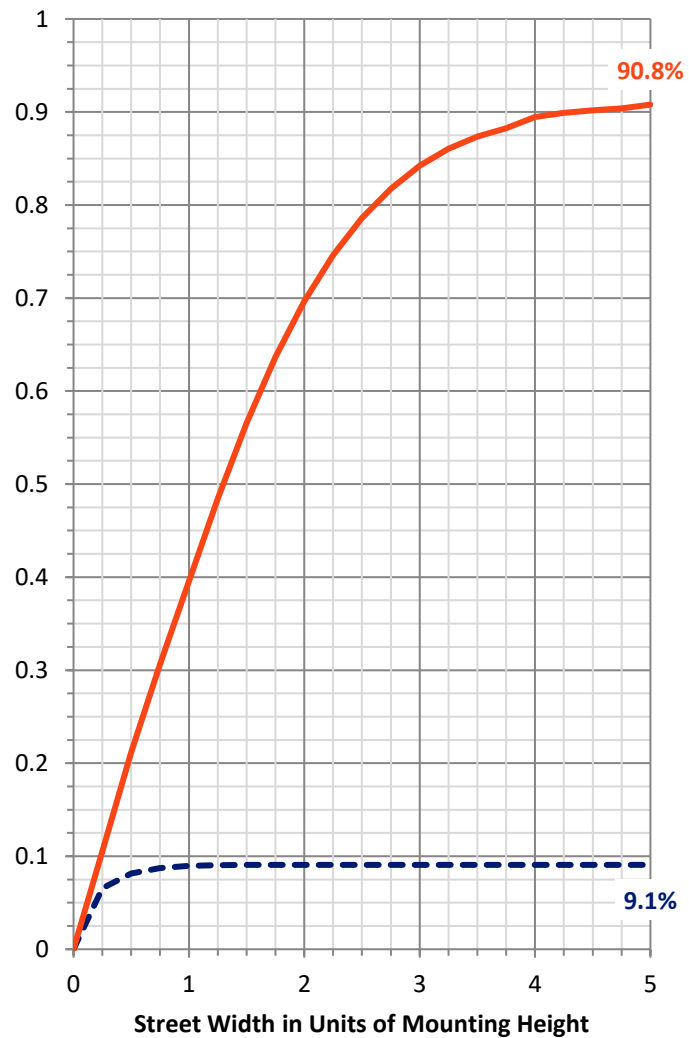
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	257.0	0.0	257.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2553.0	0.0	2553.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	2810.0	0.0	2810.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.4	1.0
10°-20°	80.4	2.9
20°-30°	133.1	4.7
30°-40°	192.6	6.9
40°-50°	315.4	11.2
50°-60°	561.9	20.0
60°-70°	826.1	29.4
70°-80°	623.2	22.2
80°-90°	48.9	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°	2810.0	100.0
0°-180°	2810.0	100.0



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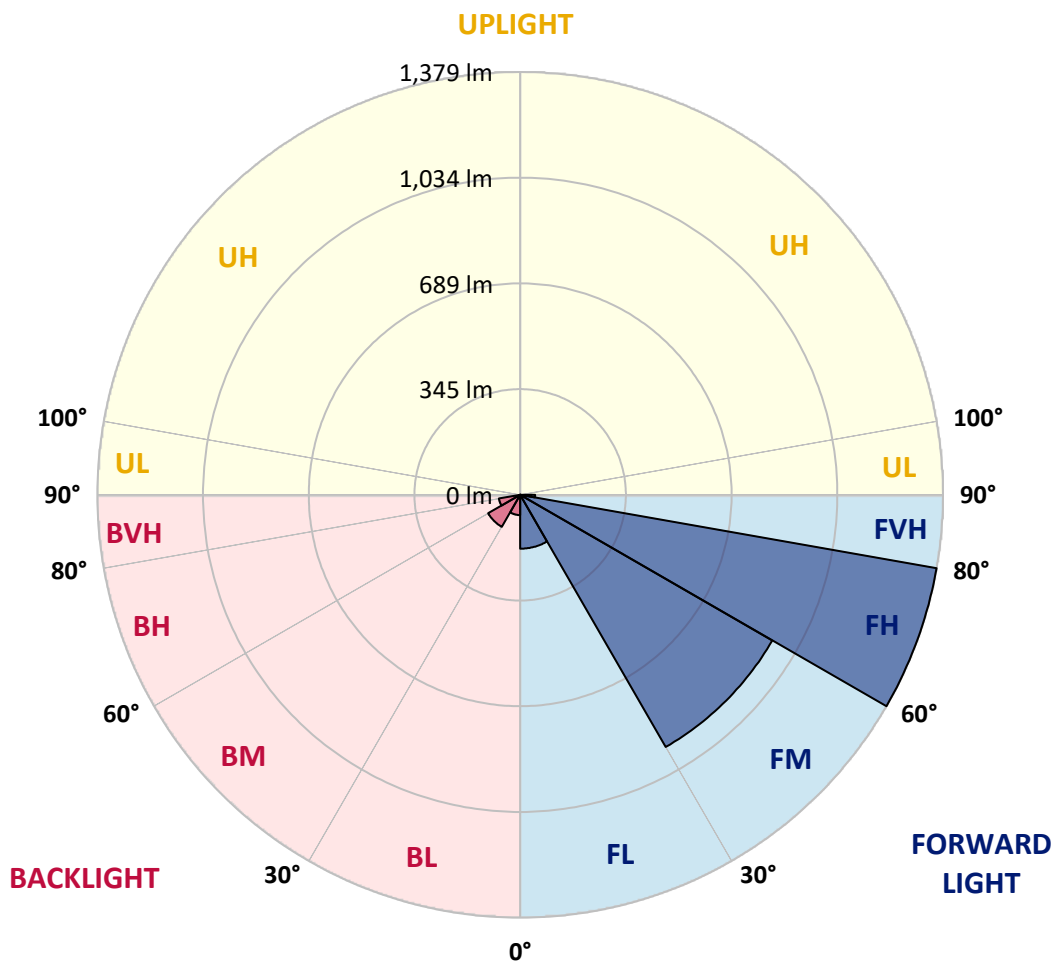
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	175.8	6.3			
FM (30°-60°)	949.5	33.8			
FH (60°-80°)	1379.0	49.1			G1/1800
FVH (80°-90°)	48.8	1.7			G1/100
BL (0°-30°)	66.0	2.4	B0/110		
BM (30°-60°)	120.4	4.3	B0/220		
BH (60°-80°)	70.4	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°	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5
2.5°	326.5	326.5	325.8	325.1	321.8	318.5	317.8	315.8	309.9	305.9	301.9
5°	353.7	354.4	353.1	349.7	342.4	335.1	334.5	329.1	317.8	309.9	301.2
7.5°	379.7	381.0	377.7	371.7	363.0	352.4	351.7	341.8	327.1	315.8	303.2
10°	401.6	401.6	397.0	389.6	380.3	369.0	367.7	356.4	339.8	325.8	309.2
12.5°	425.6	424.9	418.2	408.3	397.6	387.0	386.3	372.4	356.4	338.4	317.8
15°	447.5	446.2	437.5	428.2	416.9	405.6	404.9	391.0	374.4	353.1	330.5
17.5°	459.5	458.8	450.8	441.5	432.2	423.6	422.9	408.3	390.3	368.4	343.1
20°	461.5	462.1	455.5	447.5	442.2	437.5	437.5	424.2	404.9	381.7	356.4
22.5°	462.1	464.1	459.5	448.8	447.5	448.2	449.5	438.8	418.9	397.0	370.4
25°	466.8	469.4	466.1	453.5	452.1	456.8	458.1	453.5	435.5	413.6	386.3
27.5°	476.1	478.7	476.1	460.1	458.1	462.8	464.1	466.8	453.5	429.5	402.9
30°	494.7	495.4	489.4	469.4	465.4	471.4	473.4	480.7	470.1	444.8	418.9
32.5°	527.3	520.6	502.7	476.1	472.8	479.4	481.4	489.4	485.4	459.5	435.5
35°	593.8	559.2	518.0	485.4	482.1	488.7	491.4	502.7	504.7	480.1	456.1
37.5°	593.1	561.9	553.9	503.3	498.7	503.3	506.7	520.6	528.6	507.3	486.1
40°	635.0	621.7	621.7	537.3	522.0	528.6	531.9	545.9	559.9	543.2	521.3
42.5°	766.7	758.0	748.7	602.4	554.5	573.2	575.2	583.8	600.4	595.1	569.2
45°	913.6	905.6	869.7	712.8	610.4	613.7	618.4	632.3	656.3	666.3	635.7
47.5°	1028.6	1020.7	990.1	845.8	697.5	668.2	668.2	695.5	732.7	758.0	728.8
50°	1121.1	1111.7	1093.1	987.4	840.5	746.7	742.7	774.6	829.8	869.1	849.1
52.5°	1210.8	1183.6	1172.3	1133.7	1002.0	860.4	849.8	872.4	948.8	997.4	980.8
55°	1270.7	1266.7	1254.7	1268.0	1171.6	998.7	989.4	994.1	1089.8	1122.4	1101.8
57.5°	1326.5	1325.9	1352.5	1414.3	1356.4	1157.0	1142.3	1135.0	1226.1	1218.1	1236.1
60°	1395.7	1383.7	1445.5	1534.0	1526.0	1311.2	1294.6	1280.0	1330.5	1307.9	1397.0
62.5°	1399.0	1395.7	1521.3	1648.3	1694.2	1468.1	1448.9	1396.3	1421.6	1395.7	1550.6
65°	1272.0	1288.6	1553.3	1708.8	1835.2	1605.8	1582.5	1500.7	1502.7	1485.4	1731.5
67.5°	1243.4	1252.0	1465.5	1774.0	1936.9	1744.8	1722.8	1621.1	1597.1	1598.5	1838.5
70°	1172.3	1185.6	1356.4	1769.4	2017.4	1930.3	1908.3	1797.9	1740.1	1675.6	1756.1
72.5°	895.6	918.3	1143.0	1551.3	1995.4	2173.0	2167.0	2022.0	1797.3	1538.6	1328.5
75°	303.2	302.5	600.4	1041.9	1792.6	2247.4	2259.4	1994.1	1567.9	1061.2	659.6
77.5°	65.2	65.8	123.7	422.2	1190.9	1804.6	1850.5	1504.1	1011.3	472.8	150.9
80°	31.9	32.6	51.2	111.7	476.1	1012.0	1083.8	773.3	373.7	94.4	25.3
82.5°	16.0	16.6	26.6	59.2	176.2	359.7	384.3	284.6	107.1	53.2	12.6
85°	6.0	6.0	13.3	35.2	80.5	84.4	103.7	82.5	64.5	43.2	3.3
87.5°	1.3	1.3	7.3	17.3	35.9	26.6	26.6	25.3	39.2	29.3	1.3
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°	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5
2.5°	299.9	297.2	292.6	287.9	284.6	280.6	278.6	276.6	275.9	275.3	276.6
5°	296.6	292.6	283.9	276.6	270.0	264.6	260.6	256.7	254.7	253.3	254.0
7.5°	296.6	290.6	277.9	266.6	256.0	244.7	233.4	224.7	218.1	214.1	214.8
10°	299.9	291.9	275.3	260.0	240.0	216.1	191.5	172.9	160.2	152.9	152.9
12.5°	307.2	296.6	275.9	252.0	218.1	176.2	139.0	116.4	107.1	101.7	102.4
15°	317.2	304.5	279.3	241.4	187.5	131.0	97.1	82.5	82.5	83.8	84.4
17.5°	328.5	314.5	281.9	225.4	148.3	93.8	76.5	75.1	77.1	80.5	80.5
20°	339.8	324.5	283.3	200.1	111.0	74.5	72.5	72.5	73.8	77.1	77.8
22.5°	353.7	337.1	281.9	168.9	83.1	70.5	69.8	69.8	69.8	73.8	73.8
25°	368.4	351.7	276.6	135.6	70.5	67.8	67.2	66.5	66.5	69.8	70.5
27.5°	385.0	367.0	264.0	103.7	66.5	65.2	64.5	63.2	63.2	65.8	65.8
30°	401.6	384.3	244.7	78.5	63.2	62.5	61.2	59.8	58.5	61.2	61.2
32.5°	419.6	402.3	219.4	62.5	58.5	58.5	57.8	55.9	54.5	55.9	56.5
35°	443.5	422.9	190.8	54.5	52.5	52.5	52.5	51.9	49.2	50.5	50.5
37.5°	475.4	451.5	157.6	50.5	47.9	46.5	46.5	46.5	44.5	45.2	45.2
40°	516.0	484.7	125.7	47.2	44.5	41.2	39.9	40.6	39.2	39.2	38.6
42.5°	571.2	520.6	94.4	44.5	41.9	37.2	34.6	33.9	32.6	31.9	31.9
45°	650.3	564.5	67.8	41.9	39.9	32.6	29.9	27.9	24.6	22.6	22.6
47.5°	752.7	614.4	50.5	39.2	37.9	28.6	25.3	21.3	16.6	15.3	15.3
50°	877.7	670.2	42.6	35.2	34.6	25.3	19.9	14.0	9.3	8.0	8.6
52.5°	999.4	722.8	37.9	31.3	30.6	21.9	14.6	7.3	4.0	4.0	4.0
55°	1101.8	760.0	34.6	27.9	26.6	17.3	8.0	3.3	2.0	2.0	2.0
57.5°	1194.2	781.3	31.3	24.6	21.3	12.0	3.3	1.3	1.3	0.7	0.7
60°	1278.6	793.9	27.3	21.3	16.6	6.6	1.3	0.7	0.7	0.0	0.0
62.5°	1361.8	803.2	23.3	17.3	12.6	2.7	0.7	0.7	0.0	0.0	0.0
65°	1424.9	799.9	18.6	14.0	8.0	1.3	0.7	0.0	0.0	0.0	0.0
67.5°	1422.9	754.7	14.0	10.6	4.0	0.7	0.0	0.0	0.0	0.0	0.0
70°	1272.7	635.7	9.3	6.6	1.3	0.7	0.0	0.0	0.0	0.0	0.0
72.5°	903.0	407.6	6.0	4.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	397.6	123.7	3.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	77.8	28.6	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	18.6	3.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.7	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)