

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: P198854

Luminaire Tested: **XNV-AF-01-LED-U-SL2-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198854
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-SL2-7050-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4933 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

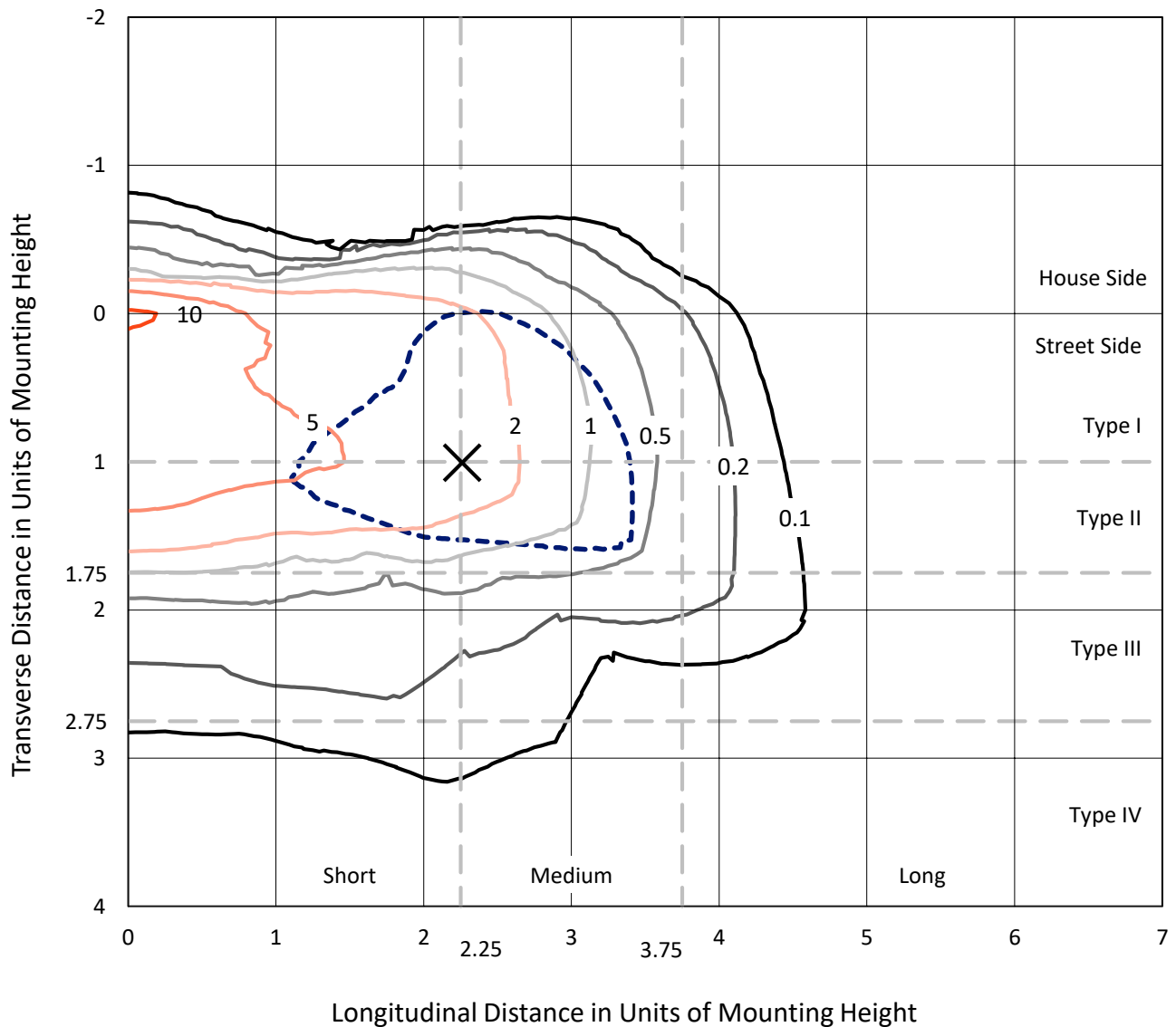
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

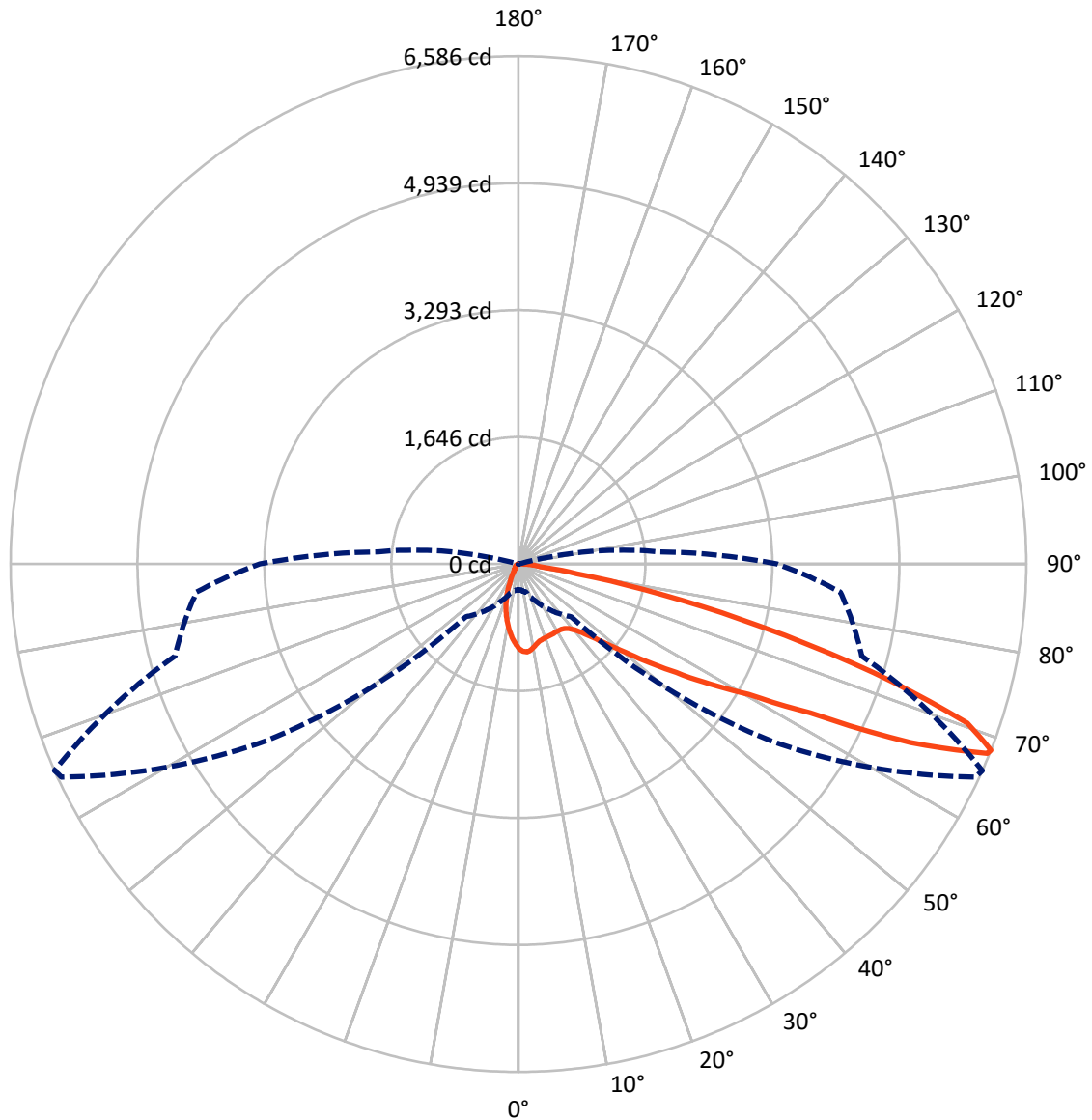
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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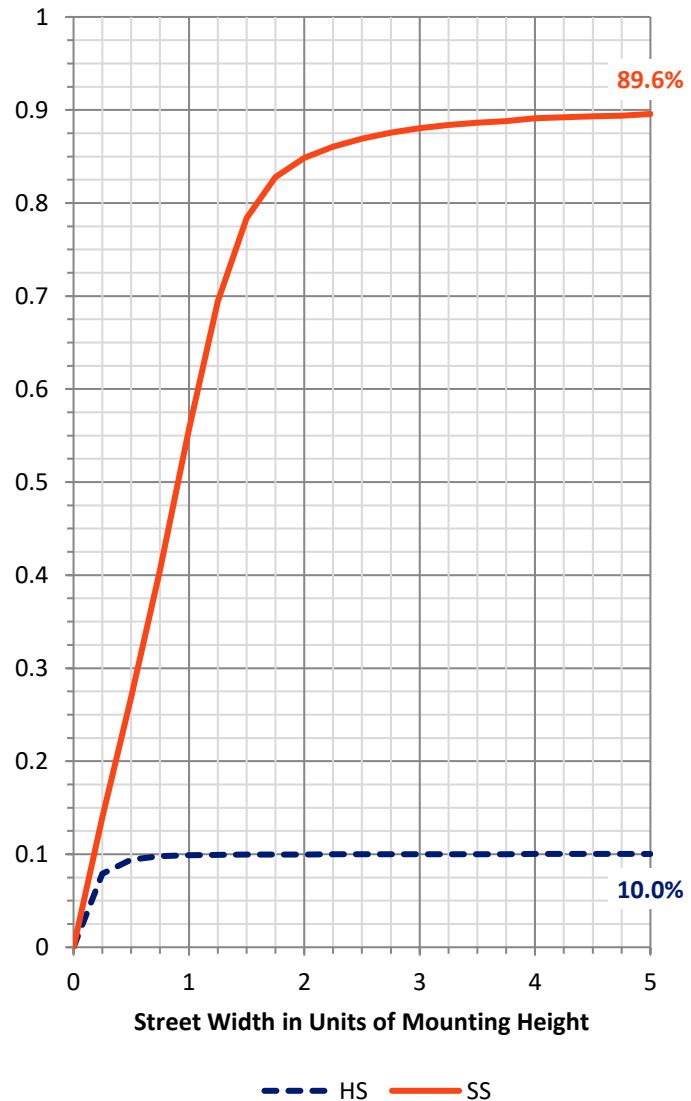
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	499.7	0.0	499.7
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	4433.3	0.0	4433.3
	% Fixture	89.9	0.0	89.9
Total	Lumens	4933.0	0.0	4933.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	1.8
10°-20°	193.9	3.9
20°-30°	280.9	5.7
30°-40°	430.0	8.7
40°-50°	735.5	14.9
50°-60°	1150.6	23.3
60°-70°	1324.8	26.9
70°-80°	663.0	13.4
80°-90°	64.2	1.3
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°	4933.0	100.0
0°-180°	4933.0	100.0



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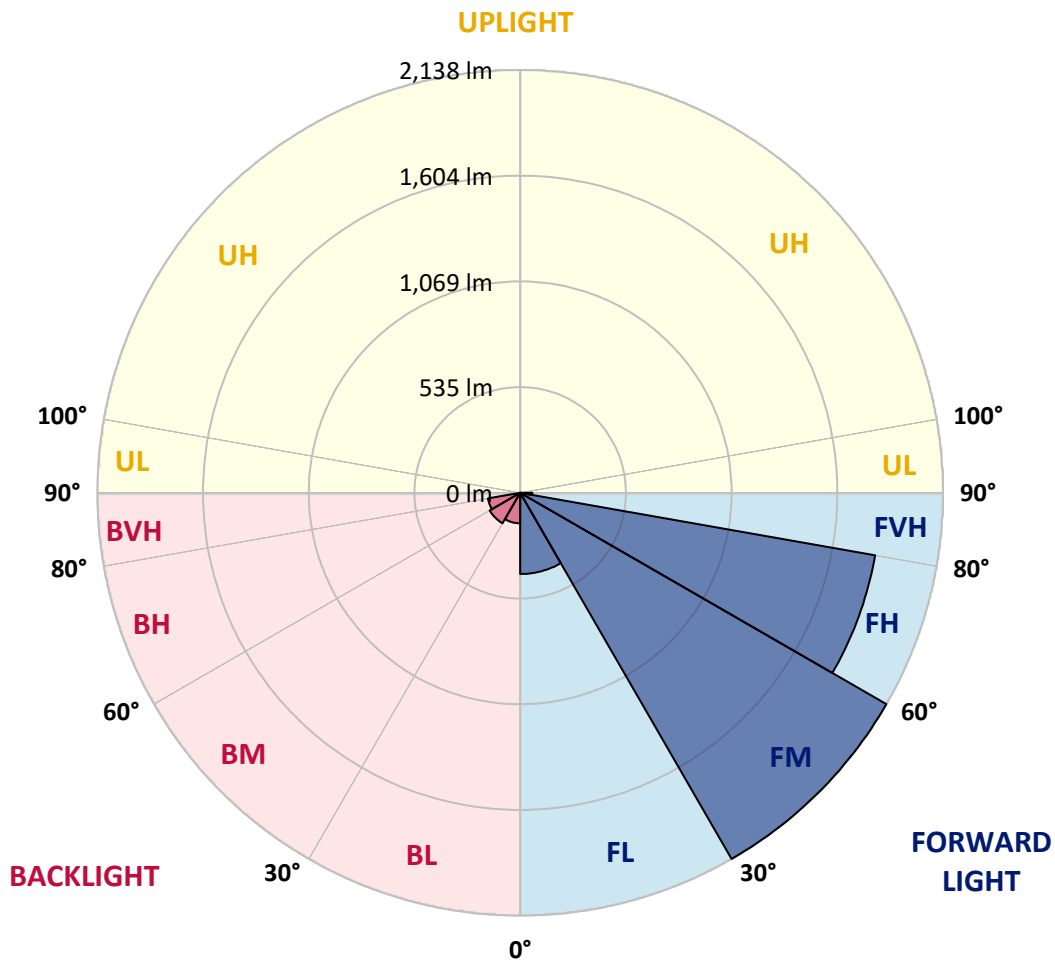
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	410.6	8.3			
FM	(30°-60°)	2138.2	43.3			
FH	(60°-80°)	1822.7	36.9			G2/5000
FVH	(80°-90°)	61.8	1.3			G1/100
BL	(0°-30°)	154.2	3.1	B1/500		
BM	(30°-60°)	177.9	3.6	B0/220		
BH	(60°-80°)	165.1	3.3	B1/500		G1/500
BVH	(80°-90°)	2.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0
2.5°	1156.0	1156.7	1156.3	1157.5	1156.7	1150.9	1144.7	1131.6	1132.7	1115.7	1096.7
5°	1074.6	1081.2	1087.8	1094.4	1110.3	1124.2	1140.8	1144.7	1144.7	1130.0	1102.1
7.5°	991.8	992.1	999.5	1008.4	1029.7	1055.3	1094.0	1128.8	1129.6	1133.5	1102.9
10°	929.4	931.3	936.4	946.1	967.4	992.5	1035.9	1090.5	1094.8	1123.4	1095.2
12.5°	881.0	883.3	888.7	900.0	919.3	945.3	991.0	1053.3	1059.1	1113.7	1092.8
15°	843.8	846.9	851.2	862.4	883.3	910.8	960.8	1028.5	1035.5	1109.9	1100.2
17.5°	828.3	828.3	827.9	835.7	856.6	884.5	936.8	1015.4	1024.3	1113.0	1112.6
20°	834.9	833.8	825.6	823.7	836.5	864.4	917.8	1006.9	1016.9	1118.8	1127.7
22.5°	869.8	867.4	849.2	834.1	830.3	848.9	905.0	1001.1	1013.1	1130.8	1147.8
25°	943.7	936.8	911.6	877.5	846.9	845.0	896.1	998.0	1010.7	1144.7	1169.9
27.5°	1039.8	1037.8	997.6	951.9	893.0	857.8	893.4	995.6	1008.4	1154.8	1187.7
30°	1159.1	1159.8	1113.4	1053.7	964.6	893.8	901.9	994.5	1007.6	1155.6	1195.5
32.5°	1282.2	1283.0	1244.2	1180.3	1062.6	955.7	925.9	999.9	1011.9	1152.5	1195.1
35°	1400.7	1401.9	1378.6	1327.1	1193.5	1041.7	971.2	1018.5	1027.0	1154.4	1194.3
37.5°	1550.6	1555.2	1526.6	1478.5	1357.7	1168.0	1045.2	1056.0	1063.0	1170.3	1200.1
40°	1806.2	1800.0	1717.9	1636.5	1535.8	1321.7	1152.1	1120.7	1123.0	1211.3	1222.2
42.5°	2103.9	2096.2	1955.6	1815.4	1719.0	1507.2	1288.8	1219.8	1219.5	1280.3	1270.2
45°	2360.3	2355.7	2207.7	2020.7	1921.9	1712.0	1457.2	1362.7	1358.1	1399.5	1357.7
47.5°	2542.3	2538.4	2426.5	2239.1	2156.6	1937.4	1667.5	1557.5	1547.9	1555.6	1499.8
50°	2560.1	2555.9	2516.8	2396.3	2430.8	2268.1	1927.4	1812.7	1800.3	1788.3	1714.8
52.5°	2393.6	2393.2	2413.8	2406.0	2622.9	2693.7	2246.1	2128.3	2113.6	2083.0	2009.8
55°	2053.2	2051.3	2129.1	2242.2	2618.6	3132.9	2732.1	2504.0	2484.6	2423.4	2327.4
57.5°	1500.2	1490.2	1652.8	1892.5	2434.7	3325.0	3503.9	2970.6	2938.5	2744.5	2596.5
60°	828.3	832.2	1041.3	1325.2	1999.0	3287.0	4214.1	3514.7	3430.3	3021.4	2872.3
62.5°	464.3	474.0	629.7	861.3	1274.5	2979.1	4595.2	4451.1	4247.8	3344.3	3220.8
65°	351.2	357.0	435.3	664.5	803.6	2081.9	4656.0	5760.4	5585.0	3833.8	3775.7
67.5°	330.7	335.4	373.7	551.1	731.9	1079.7	4198.2	6534.9	6557.0	4501.4	4205.6
68°	333.0	338.8	377.2	530.2	730.7	965.8	4003.0	6538.8	6585.6	4609.1	4190.9
70°	305.9	307.5	398.9	520.1	708.3	761.0	2895.9	6090.7	6174.8	4737.3	3804.4
72.5°	117.0	117.3	178.9	450.4	742.0	765.2	1458.8	4813.9	4818.2	4122.7	2966.0
75°	60.8	51.1	56.2	141.0	708.7	745.9	731.9	3287.0	3266.5	2788.2	1817.4
77.5°	41.8	35.6	37.6	48.8	294.7	745.5	528.6	1890.2	1885.9	1186.2	518.5
80°	23.6	20.5	22.5	41.0	103.4	699.8	492.6	812.5	765.6	208.3	84.0
82.5°	12.0	10.1	12.0	34.5	64.3	440.3	479.0	318.7	283.9	49.6	54.6
85°	3.1	3.1	5.8	24.0	39.9	144.4	429.5	230.0	206.8	21.7	38.7
87.5°	0.8	0.4	2.3	8.9	14.3	31.4	238.2	128.2	110.4	11.2	22.5
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°	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0	1099.0
2.5°	1089.0	1078.1	1056.8	1032.8	1015.8	997.2	986.3	973.2	963.1	954.2	960.8
5°	1085.1	1064.2	1016.9	963.9	919.3	876.7	845.0	814.8	791.9	777.6	783.4
7.5°	1075.0	1044.0	967.4	884.5	811.7	743.1	687.4	637.4	598.7	577.8	584.4
10°	1058.0	1014.2	911.2	796.2	694.3	597.5	514.7	440.3	384.2	357.8	364.0
12.5°	1045.6	987.9	853.1	711.0	577.0	439.5	329.6	244.4	200.6	174.3	176.6
15°	1040.2	967.4	798.9	621.2	448.8	282.3	178.1	129.0	113.9	108.4	108.8
17.5°	1040.9	951.1	747.4	527.8	319.5	162.3	109.2	98.4	96.0	94.9	94.9
20°	1042.9	934.8	694.0	430.6	204.5	104.6	91.0	87.5	86.4	84.8	85.2
22.5°	1048.7	922.4	640.1	333.0	125.9	85.2	80.5	77.5	75.5	73.2	73.6
25°	1057.6	913.1	587.1	239.7	88.7	74.4	70.1	65.8	62.3	59.6	60.0
27.5°	1063.0	900.0	530.5	163.4	73.6	65.1	59.2	53.4	49.6	47.2	46.9
30°	1059.1	878.7	466.3	107.3	65.1	56.2	49.2	42.6	38.7	36.8	36.8
32.5°	1048.7	851.2	395.4	78.2	57.7	48.4	39.9	34.1	31.4	30.2	30.6
35°	1036.7	822.5	319.9	66.2	51.9	41.0	32.5	27.9	26.7	26.3	26.3
37.5°	1030.1	797.7	247.5	60.0	46.5	34.1	26.7	24.0	22.8	22.8	22.8
40°	1037.5	778.8	183.2	55.4	41.0	28.3	22.5	20.5	20.1	20.1	20.1
42.5°	1068.8	772.2	134.0	51.5	35.6	23.6	19.4	17.8	17.4	17.8	17.8
45°	1130.0	786.5	101.5	47.6	30.6	19.4	16.7	15.5	15.5	15.9	15.9
47.5°	1233.8	823.3	83.3	43.8	25.6	16.3	14.3	13.6	13.6	13.9	13.9
50°	1394.9	891.5	74.7	39.5	21.3	13.9	12.0	11.6	11.6	12.0	12.4
52.5°	1639.6	1021.2	70.5	35.2	17.4	11.6	10.1	9.7	10.1	10.5	10.5
55°	1911.9	1187.3	65.4	31.0	14.7	9.7	8.1	8.1	8.5	9.3	9.3
57.5°	2165.5	1347.6	60.8	25.6	12.8	7.7	6.6	6.6	7.4	8.1	8.1
60°	2433.5	1504.9	54.6	20.5	10.8	6.2	5.4	5.4	6.6	7.4	7.7
62.5°	2764.6	1687.7	46.5	16.3	8.5	4.6	3.9	5.0	6.2	7.4	7.4
65°	3243.2	1915.0	36.4	12.8	6.6	3.5	3.1	4.6	5.8	7.0	7.4
67.5°	3417.1	1885.9	27.5	10.5	5.0	2.7	2.7	4.3	5.8	7.0	7.0
68°	3353.6	1822.4	26.3	10.1	4.6	2.7	2.7	4.3	5.8	7.0	7.0
70°	2922.2	1489.8	21.7	7.7	3.9	2.3	2.3	3.9	5.8	6.6	7.0
72.5°	2188.0	989.8	18.6	5.0	3.5	2.3	1.9	3.9	5.4	6.6	6.6
75°	1255.1	410.9	15.9	3.9	3.1	1.9	1.9	3.5	5.4	6.6	6.6
77.5°	354.7	96.0	12.8	3.1	2.7	1.9	1.5	3.5	5.0	6.2	6.2
80°	65.1	28.7	10.1	2.7	2.3	1.9	1.5	3.5	5.0	6.2	6.2
82.5°	43.0	13.6	7.4	2.7	2.3	1.9	1.5	3.1	4.6	5.8	5.8
85°	32.1	9.7	4.6	2.7	2.3	1.9	1.5	3.1	4.6	5.8	5.8
87.5°	17.8	4.3	3.5	3.1	2.7	1.9	1.5	2.7	4.3	5.4	5.4
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)