

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: LUMARK

Report Number: P881718

Luminaire Tested: **NAV-SB1B-730-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-730-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4351 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

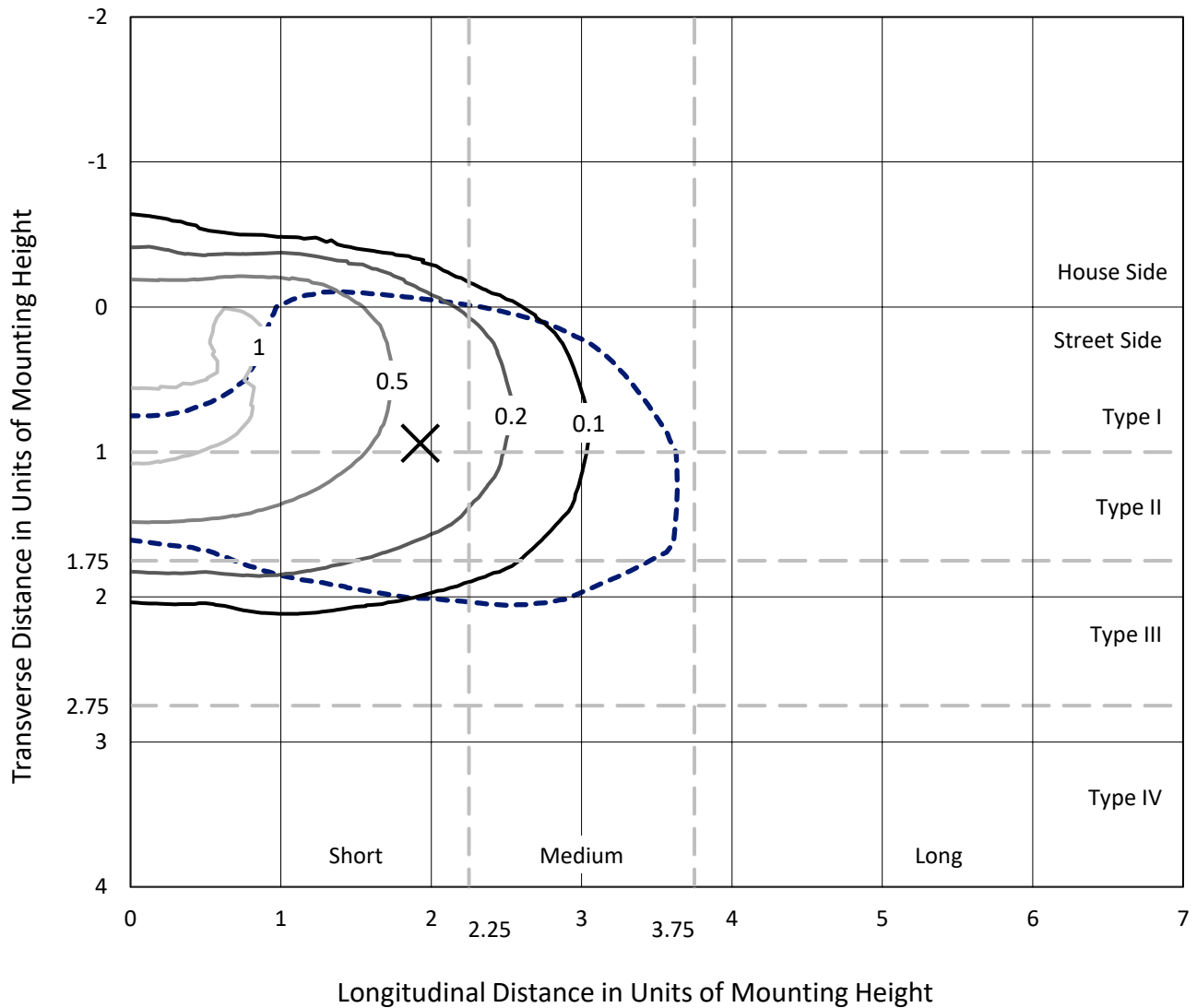
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

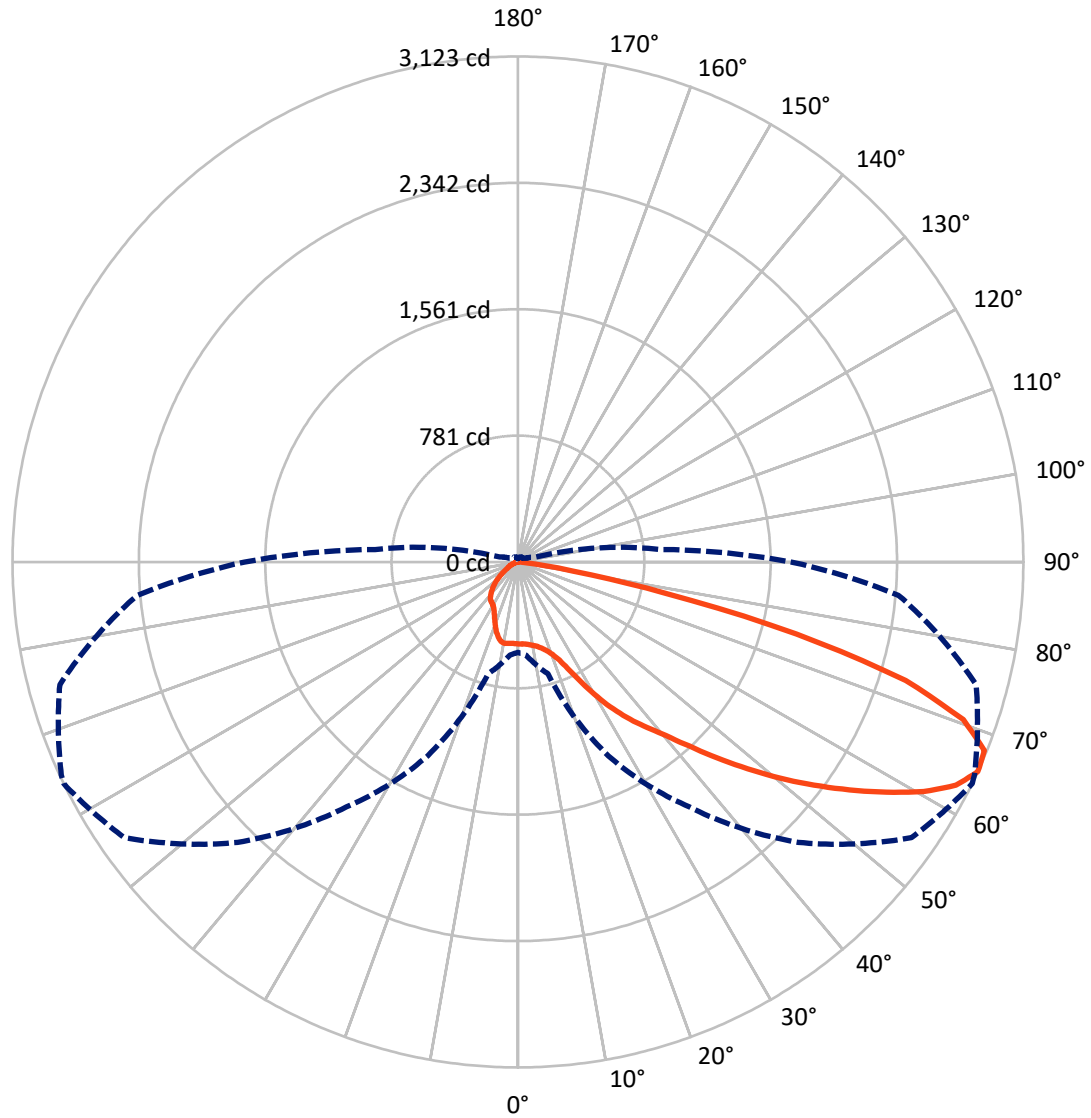
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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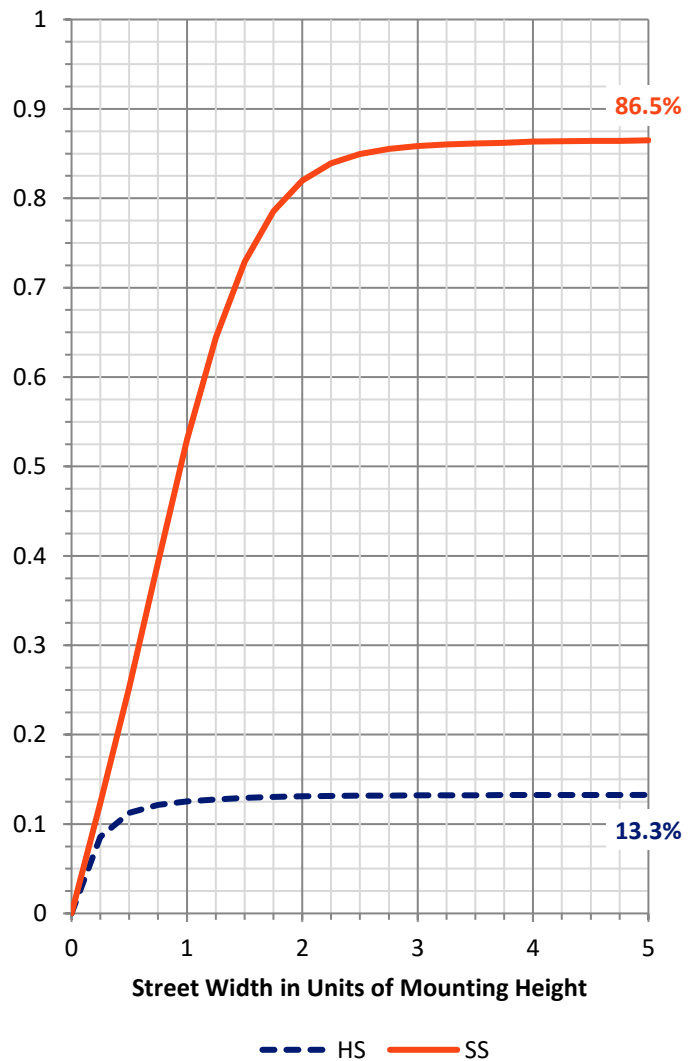
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	581.9	0.0	581.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3769.1	0.0	3769.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	4351.0	0.0	4351.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	1.1
10°-20°	126.6	2.9
20°-30°	240.0	5.5
30°-40°	485.6	11.2
40°-50°	827.2	19.0
50°-60°	1124.9	25.9
60°-70°	1056.3	24.3
70°-80°	423.2	9.7
80°-90°	20.5	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°	4351.0	100.0
0°-180°	4351.0	100.0

Coefficient of Utilization



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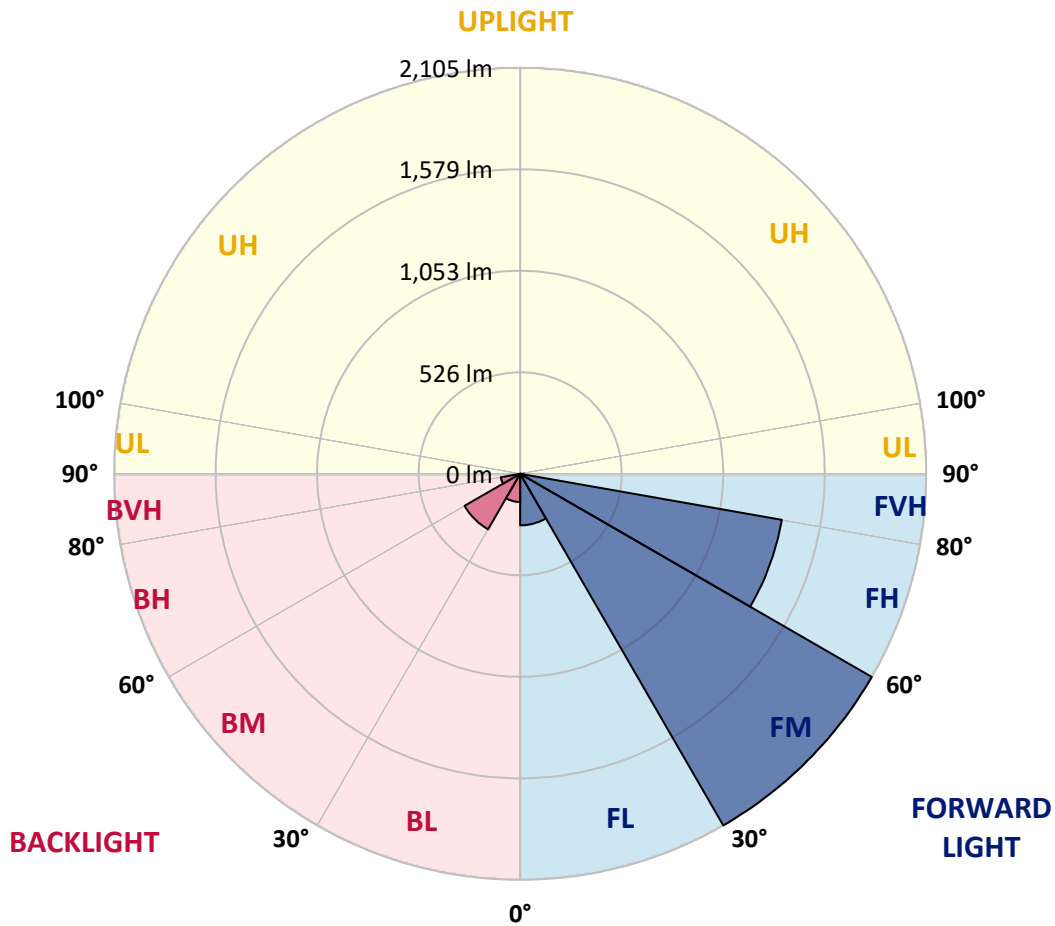
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	267.2	6.1			
FM (30°-60°)	2105.0	48.4			
FH (60°-80°)	1377.4	31.7			G1/1800
FVH (80°-90°)	19.5	0.4			G1/100
BL (0°-30°)	146.1	3.4	B1/500		
BM (30°-60°)	332.6	7.6	B1/1000		
BH (60°-80°)	102.1	2.3	B0/110		G0/110
BVH (80°-90°)	1.0	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-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1
2.5°	504.3	507.8	506.9	506.1	505.8	506.4	506.6	506.4	506.4	506.4	506.6
5°	494.7	497.6	497.6	499.6	502.6	506.1	508.7	509.3	509.9	510.7	510.4
7.5°	476.3	478.6	480.4	487.1	494.4	503.7	511.6	515.7	516.3	519.5	520.7
10°	463.8	466.7	469.6	476.6	487.1	501.1	514.5	524.4	525.9	533.5	537.0
12.5°	463.2	466.1	469.9	477.5	489.7	504.6	520.9	535.2	537.9	548.9	556.2
15°	469.3	472.8	476.3	485.6	498.8	516.9	534.4	552.2	554.8	570.5	578.4
17.5°	481.9	486.5	489.1	498.5	512.5	532.6	555.7	576.1	578.4	596.8	606.7
20°	506.6	512.2	513.1	520.7	534.4	555.9	583.4	608.7	611.7	632.7	643.7
22.5°	558.0	565.9	558.9	562.7	574.9	596.5	626.2	658.3	662.4	686.3	696.2
25°	648.4	659.5	641.4	635.0	640.2	662.7	700.0	740.6	745.2	764.5	769.5
27.5°	826.0	811.7	784.3	757.5	741.7	754.6	796.6	846.7	852.6	871.3	865.4
30°	1021.2	1008.6	971.6	912.1	874.8	872.7	911.5	967.5	974.2	992.0	974.2
32.5°	1216.6	1204.6	1164.4	1091.2	1026.4	994.3	1021.2	1083.3	1086.8	1098.2	1071.9
35°	1408.8	1396.6	1356.3	1281.4	1201.7	1128.8	1123.6	1193.6	1194.7	1206.7	1167.6
37.5°	1602.2	1592.0	1549.1	1475.6	1397.2	1296.5	1247.8	1298.0	1299.4	1311.1	1270.6
40°	1740.2	1744.5	1715.1	1658.2	1590.8	1480.9	1387.2	1409.1	1400.4	1419.9	1395.7
42.5°	1858.6	1867.3	1841.7	1813.1	1774.0	1677.2	1559.9	1556.1	1542.1	1552.6	1527.5
45°	1961.0	1968.3	1945.2	1938.5	1937.6	1869.7	1748.6	1725.9	1706.3	1704.3	1674.2
47.5°	1998.6	2012.6	2022.5	2045.0	2088.7	2060.1	1943.8	1908.5	1886.6	1870.6	1823.0
50°	2012.9	2027.8	2061.6	2126.9	2230.5	2242.7	2138.0	2098.4	2071.5	2042.4	1972.3
52.5°	1993.6	2020.2	2065.7	2175.6	2325.9	2389.2	2324.4	2289.7	2259.1	2211.5	2107.7
55°	1880.2	1906.7	1999.8	2175.1	2373.4	2491.8	2500.6	2485.1	2450.7	2375.7	2217.1
57.5°	1641.0	1680.4	1827.7	2101.0	2372.5	2580.2	2673.3	2684.3	2645.8	2538.5	2303.1
60°	1309.6	1363.0	1542.7	1936.8	2299.3	2628.0	2824.6	2880.1	2839.2	2698.9	2372.8
62.5°	913.8	975.7	1145.7	1679.5	2131.9	2593.6	2935.2	3037.6	3006.6	2842.4	2399.7
65°	557.4	577.2	714.3	1321.6	1847.2	2449.5	2969.3	3122.7	3112.5	2930.2	2360.0
67.5°	371.3	387.9	427.3	906.3	1433.9	2161.6	2887.6	3107.9	3110.8	2915.9	2214.7
70°	223.7	238.0	263.7	527.1	929.3	1711.0	2634.8	2918.3	2935.2	2724.9	1939.4
72.5°	92.2	101.8	125.1	238.9	481.3	1085.9	2098.1	2505.5	2544.9	2291.2	1488.4
75°	52.2	57.2	73.5	119.9	208.8	506.1	1270.9	1778.7	1836.7	1579.2	895.5
77.5°	34.7	37.0	47.5	77.6	117.5	172.7	543.1	926.7	1037.5	862.5	387.6
80°	23.3	25.4	32.7	51.9	76.4	74.1	173.0	343.3	422.4	296.3	94.5
82.5°	15.8	16.0	23.3	34.1	48.4	35.9	51.0	106.8	134.2	85.8	35.9
85°	9.0	8.8	17.2	19.8	21.6	14.9	15.5	32.1	42.0	36.2	20.4
87.5°	1.2	1.8	6.7	5.3	2.9	3.2	3.2	5.5	8.2	8.8	4.4
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°	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1	506.1
2.5°	506.6	506.4	505.5	504.6	502.6	501.4	502.0	501.4	501.1	501.4	502.6
5°	510.4	509.6	507.2	504.3	500.2	495.3	492.1	487.4	483.0	480.4	481.0
7.5°	520.7	519.8	516.6	508.4	495.3	474.6	455.6	439.0	426.4	419.1	419.4
10°	537.0	535.5	530.6	512.5	478.1	432.9	395.2	364.0	343.6	334.0	333.1
12.5°	556.2	554.5	545.7	508.7	445.4	374.8	322.9	288.2	269.2	260.8	259.9
15°	579.0	576.7	559.4	490.6	397.9	310.6	263.1	237.1	224.9	217.3	217.6
17.5°	607.3	603.2	569.7	463.5	346.2	261.6	226.3	206.8	196.0	188.7	188.1
20°	644.0	637.3	577.8	431.1	298.7	230.7	201.6	185.2	177.1	170.6	169.5
22.5°	695.4	685.7	587.7	396.1	265.1	209.4	183.2	171.2	164.5	157.2	156.0
25°	759.0	747.6	600.0	363.7	242.1	191.1	169.8	159.8	152.0	143.5	142.6
27.5°	847.9	827.5	614.6	337.2	222.3	175.3	157.5	146.4	137.4	130.4	128.9
30°	947.1	913.5	627.4	321.1	204.2	160.7	141.5	130.4	121.9	117.0	116.1
32.5°	1041.0	995.5	635.9	314.1	187.8	144.1	124.0	112.0	105.6	104.1	105.0
35°	1129.7	1069.6	635.0	307.4	173.3	127.5	106.8	94.5	89.5	90.4	90.4
37.5°	1231.8	1148.6	628.9	296.9	161.3	112.3	91.9	81.1	76.7	77.0	78.2
40°	1350.5	1239.9	625.1	277.1	148.2	98.3	79.6	70.9	67.7	66.5	66.2
42.5°	1477.1	1328.3	625.7	254.6	131.8	85.8	71.2	63.9	61.0	60.1	59.8
45°	1604.2	1412.6	626.5	231.3	114.6	76.1	65.0	58.9	57.2	56.0	56.0
47.5°	1723.8	1484.4	610.2	206.2	97.7	68.8	60.1	56.0	54.5	53.1	53.1
50°	1835.3	1532.2	570.8	177.1	84.3	63.0	56.3	53.4	51.9	50.5	50.5
52.5°	1921.9	1539.8	505.8	147.0	75.0	58.6	54.0	51.3	49.6	48.1	47.8
55°	1960.4	1492.2	413.3	119.0	67.7	54.8	51.6	49.0	47.0	45.5	45.2
57.5°	1950.5	1392.2	322.3	95.7	60.7	51.0	48.7	47.0	44.6	42.3	42.0
60°	1901.8	1258.3	243.0	79.6	54.3	47.0	45.5	44.0	40.8	37.3	36.8
62.5°	1817.5	1090.0	173.3	65.9	47.3	42.3	41.7	40.5	35.9	29.5	28.9
65°	1688.5	885.5	116.7	54.8	40.5	37.0	37.3	35.3	29.2	21.9	21.3
67.5°	1500.1	647.5	74.7	44.9	33.8	30.9	31.2	30.0	24.8	18.7	17.8
70°	1260.1	428.8	48.7	34.1	27.1	23.9	25.7	26.0	21.0	15.2	14.6
72.5°	923.8	253.2	34.1	25.4	19.8	16.6	21.0	21.6	16.9	11.4	10.8
75°	526.5	120.2	25.7	18.4	12.3	11.7	16.3	16.3	11.7	7.6	7.0
77.5°	221.1	50.2	18.1	12.0	7.0	6.7	11.1	10.2	5.8	3.5	3.5
80°	63.9	22.5	9.6	5.8	2.9	2.6	4.4	3.2	1.5	0.6	0.6
82.5°	25.1	9.9	3.8	2.3	1.2	1.2	0.6	0.0	0.0	0.0	0.0
85°	14.9	4.1	1.8	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	0.9	0.6	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)