

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: P960915

Luminaire Tested: **NAV-SB1D-740-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8657.2 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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: 24 FT

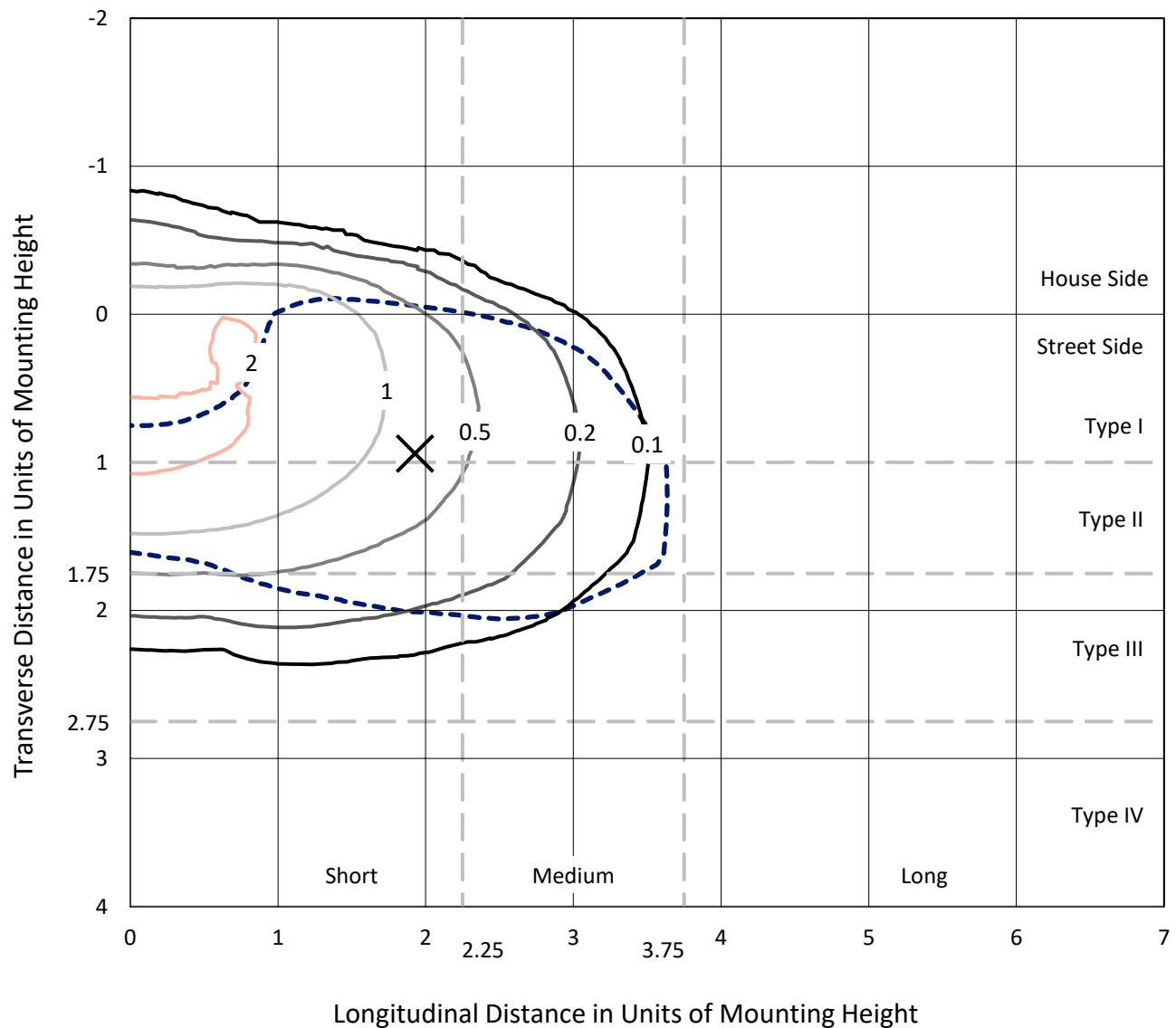


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

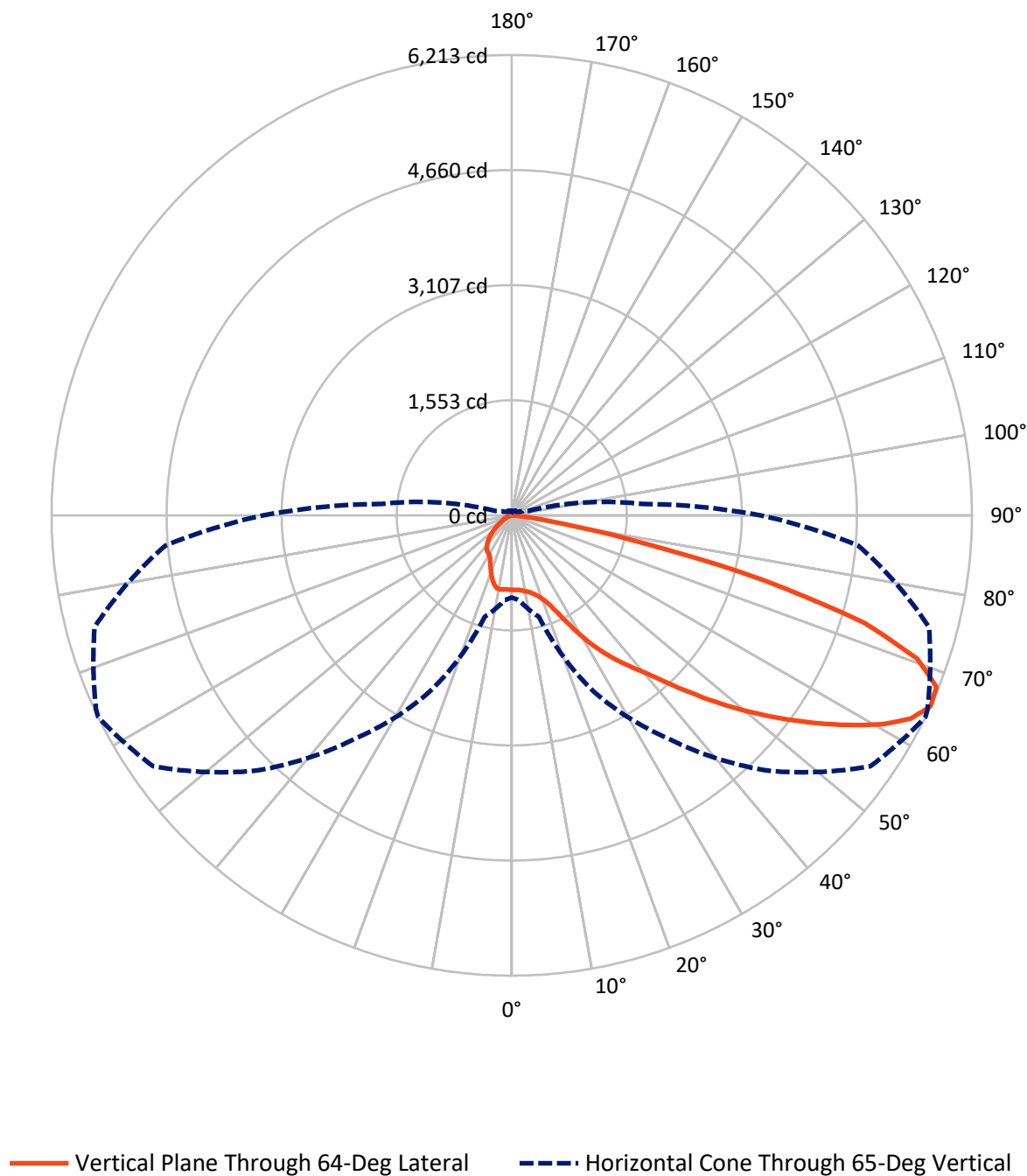


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1157.7	0.0	1157.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7499.4	0.0	7499.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	8657.2	0.0	8657.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	1.1
10°-20°	252.0	2.9
20°-30°	477.5	5.5
30°-40°	966.1	11.2
40°-50°	1645.8	19.0
50°-60°	2238.2	25.9
60°-70°	2101.8	24.3
70°-80°	842.1	9.7
80°-90°	40.8	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°	8657.2	100.0
0°-180°	8657.2	100.0

Coefficient of Utilization



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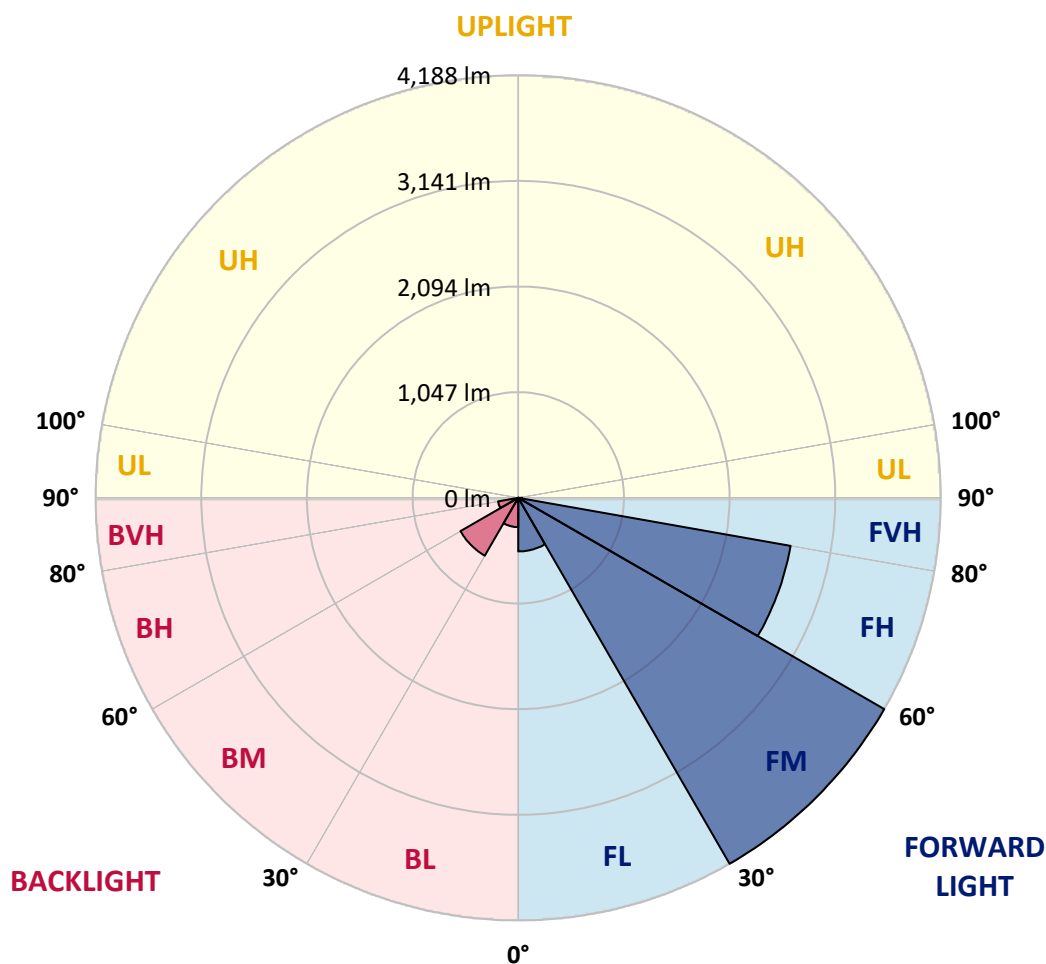
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	531.6	6.1			
FM	(30°-60°)	4188.3	48.4			
FH	(60°-80°)	2740.7	31.7			G2/5000
FVH	(80°-90°)	38.8	0.4			G1/100
BL	(0°-30°)	290.7	3.4	B1/500		
BM	(30°-60°)	661.9	7.6	B1/1000		
BH	(60°-80°)	203.2	2.3	B1/500		G1/500
BVH	(80°-90°)	2.0	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0
2.5°	1003.5	1010.4	1008.7	1007.0	1006.3	1007.5	1008.1	1007.5	1007.5	1007.5	1008.1
5°	984.3	990.0	990.0	994.1	1000.0	1007.0	1012.2	1013.3	1014.4	1016.2	1015.7
7.5°	947.7	952.3	955.8	969.2	983.7	1002.2	1017.9	1026.0	1027.3	1033.6	1036.0
10°	922.8	928.5	934.4	948.3	969.2	997.0	1023.8	1043.4	1046.4	1061.5	1068.5
12.5°	921.6	927.4	934.9	950.1	974.5	1004.0	1036.5	1065.0	1070.2	1092.2	1106.7
15°	933.8	940.7	947.7	966.3	992.4	1028.4	1063.2	1098.6	1103.8	1135.2	1150.9
17.5°	958.8	968.0	973.2	991.8	1019.7	1059.7	1105.6	1146.2	1150.9	1187.4	1207.1
20°	1008.1	1019.1	1020.8	1036.0	1063.2	1106.2	1160.7	1211.2	1217.0	1258.8	1280.8
22.5°	1110.2	1125.9	1111.9	1119.5	1143.9	1186.8	1246.0	1309.8	1317.9	1365.6	1385.3
25°	1290.2	1312.2	1276.2	1263.4	1273.9	1318.6	1392.9	1473.5	1482.8	1521.1	1530.9
27.5°	1643.6	1615.1	1560.6	1507.2	1475.8	1501.4	1585.0	1684.8	1696.4	1733.5	1721.9
30°	2031.9	2006.8	1933.2	1814.8	1740.4	1736.5	1813.6	1925.1	1938.4	1973.7	1938.4
32.5°	2420.6	2396.9	2316.8	2171.2	2042.3	1978.5	2031.9	2155.5	2162.4	2185.0	2132.8
35°	2803.1	2778.8	2698.6	2549.5	2391.0	2246.0	2235.5	2374.8	2377.2	2401.0	2323.2
37.5°	3187.9	3167.6	3082.3	2936.0	2779.9	2579.7	2482.8	2582.6	2585.5	2608.7	2528.1
40°	3462.4	3471.1	3412.5	3299.3	3165.3	2946.5	2760.1	2803.7	2786.3	2825.2	2777.0
42.5°	3698.0	3715.4	3664.4	3607.5	3529.7	3337.1	3103.7	3096.2	3068.3	3089.2	3039.3
45°	3901.8	3916.2	3870.4	3857.1	3855.3	3720.0	3479.3	3434.0	3395.1	3391.0	3331.2
47.5°	3976.6	4004.5	4024.2	4068.8	4156.0	4099.1	3867.5	3797.2	3753.8	3721.8	3627.3
50°	4005.0	4034.6	4101.9	4231.9	4437.9	4462.3	4254.0	4175.0	4121.7	4063.6	3924.3
52.5°	3966.7	4019.5	4110.0	4328.9	4627.8	4753.6	4624.9	4555.8	4494.8	4400.2	4193.7
55°	3740.9	3793.8	3978.9	4327.8	4722.4	4957.9	4975.3	4944.6	4876.1	4727.0	4411.3
57.5°	3265.0	3343.4	3636.5	4180.3	4720.6	5133.8	5318.9	5341.0	5264.4	5050.8	4582.5
60°	2605.8	2712.0	3069.5	3853.6	4575.0	5229.0	5620.2	5730.5	5649.2	5370.1	4721.2
62.5°	1818.2	1941.2	2279.6	3341.7	4241.9	5160.6	5840.1	6043.8	5982.3	5655.5	4774.6
65°	1109.0	1148.5	1421.3	2629.6	3675.3	4873.9	5908.0	6213.2	6192.9	5830.2	4695.6
67.5°	738.8	771.8	850.2	1803.2	2853.0	4301.0	5745.5	6183.7	6189.5	5801.8	4406.7
70°	445.2	473.6	524.6	1048.7	1849.0	3404.3	5242.4	5806.4	5840.1	5421.6	3858.8
72.5°	183.4	202.5	249.0	475.3	957.6	2160.7	4174.5	4985.3	5063.6	4558.7	2961.5
75°	103.8	113.8	146.3	238.5	415.5	1007.0	2528.6	3539.0	3654.5	3142.0	1781.7
77.5°	69.1	73.7	94.6	154.4	233.9	343.6	1080.7	1843.8	2064.4	1716.2	771.3
80°	46.4	50.5	65.0	103.3	152.0	147.4	344.2	683.1	840.4	589.7	188.0
82.5°	31.4	31.9	46.4	67.9	96.4	71.3	101.6	212.4	267.0	170.7	71.3
85°	18.0	17.4	34.2	39.5	42.9	29.6	30.7	63.9	83.5	72.0	40.6
87.5°	2.4	3.5	13.3	10.5	5.8	6.4	6.4	11.1	16.3	17.4	8.7
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°	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0	1007.0
2.5°	1008.1	1007.5	1005.7	1004.0	1000.0	997.6	998.8	997.6	997.0	997.6	1000.0
5°	1015.7	1013.9	1009.2	1003.5	995.3	985.4	979.1	969.8	961.0	955.8	957.0
7.5°	1036.0	1034.2	1027.8	1011.6	985.4	944.2	906.5	873.4	848.5	833.9	834.6
10°	1068.5	1065.5	1055.6	1019.7	951.2	861.2	786.4	724.3	683.7	664.5	662.8
12.5°	1106.7	1103.2	1085.9	1012.2	886.2	745.8	642.5	573.4	535.7	518.9	517.1
15°	1152.0	1147.4	1113.1	976.1	791.6	618.1	523.5	471.8	447.4	432.3	433.0
17.5°	1208.3	1200.2	1133.4	922.2	688.9	520.6	450.4	411.4	390.0	375.5	374.3
20°	1281.5	1268.0	1149.6	857.7	594.3	459.1	401.0	368.5	352.3	339.5	337.2
22.5°	1383.5	1364.4	1169.4	788.1	527.6	416.7	364.5	340.7	327.3	312.8	310.5
25°	1510.1	1487.5	1193.8	723.8	481.6	380.2	337.7	318.1	302.4	285.6	283.8
27.5°	1687.0	1646.5	1222.8	670.9	442.2	348.8	313.3	291.3	273.4	259.4	256.6
30°	1884.5	1817.6	1248.3	639.0	406.2	319.8	281.5	259.4	242.6	232.7	230.9
32.5°	2071.3	1980.7	1265.2	625.0	373.7	286.7	246.6	222.8	210.1	207.2	208.9
35°	2247.7	2128.2	1263.4	611.7	344.7	253.6	212.4	188.0	178.1	179.9	179.9
37.5°	2450.9	2285.4	1251.2	590.8	320.9	223.4	182.9	161.3	152.6	153.2	155.5
40°	2687.0	2467.1	1243.7	551.3	294.8	195.6	158.5	141.0	134.7	132.3	131.7
42.5°	2938.9	2643.0	1244.9	506.7	262.3	170.7	141.7	127.1	121.3	119.5	119.0
45°	3192.0	2810.7	1246.6	460.2	228.1	151.5	129.5	117.3	113.8	111.4	111.4
47.5°	3429.9	2953.4	1214.1	410.3	194.4	136.9	119.5	111.4	108.5	105.6	105.6
50°	3651.6	3048.7	1135.8	352.3	167.7	125.4	112.0	106.2	103.3	100.4	100.4
52.5°	3824.0	3063.7	1006.3	292.5	149.1	116.6	107.3	102.2	98.7	95.7	95.2
55°	3900.5	2969.1	822.4	236.8	134.7	109.1	102.7	97.5	93.5	90.5	90.0
57.5°	3880.9	2770.1	641.3	190.3	120.7	101.6	97.0	93.5	88.8	84.2	83.5
60°	3783.9	2503.7	483.4	158.5	107.9	93.5	90.5	87.6	81.3	74.3	73.1
62.5°	3616.2	2168.8	344.7	131.2	94.0	84.2	83.0	80.7	71.3	58.6	57.5
65°	3359.6	1762.0	232.2	109.1	80.7	73.7	74.3	70.2	58.0	43.6	42.3
67.5°	2984.8	1288.4	148.5	89.4	67.3	61.5	62.1	59.8	49.3	37.1	35.4
70°	2507.1	853.1	97.0	67.9	54.0	47.6	51.0	51.7	41.8	30.1	29.0
72.5°	1838.0	503.8	67.9	50.5	39.5	33.1	41.8	42.9	33.6	22.7	21.4
75°	1047.6	239.1	51.0	36.6	24.4	23.2	32.5	32.5	23.2	15.1	13.9
77.5°	439.9	99.8	36.0	23.8	13.9	13.3	22.0	20.3	11.6	7.0	7.0
80°	127.1	44.7	19.2	11.6	5.8	5.2	8.7	6.4	2.9	1.1	1.1
82.5°	49.9	19.8	7.6	4.6	2.4	2.4	1.1	0.0	0.0	0.0	0.0
85°	29.6	8.1	3.5	1.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.6	1.7	1.1	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)