

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: P881943

Luminaire Tested: **NAV-SB1C-830-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4578 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

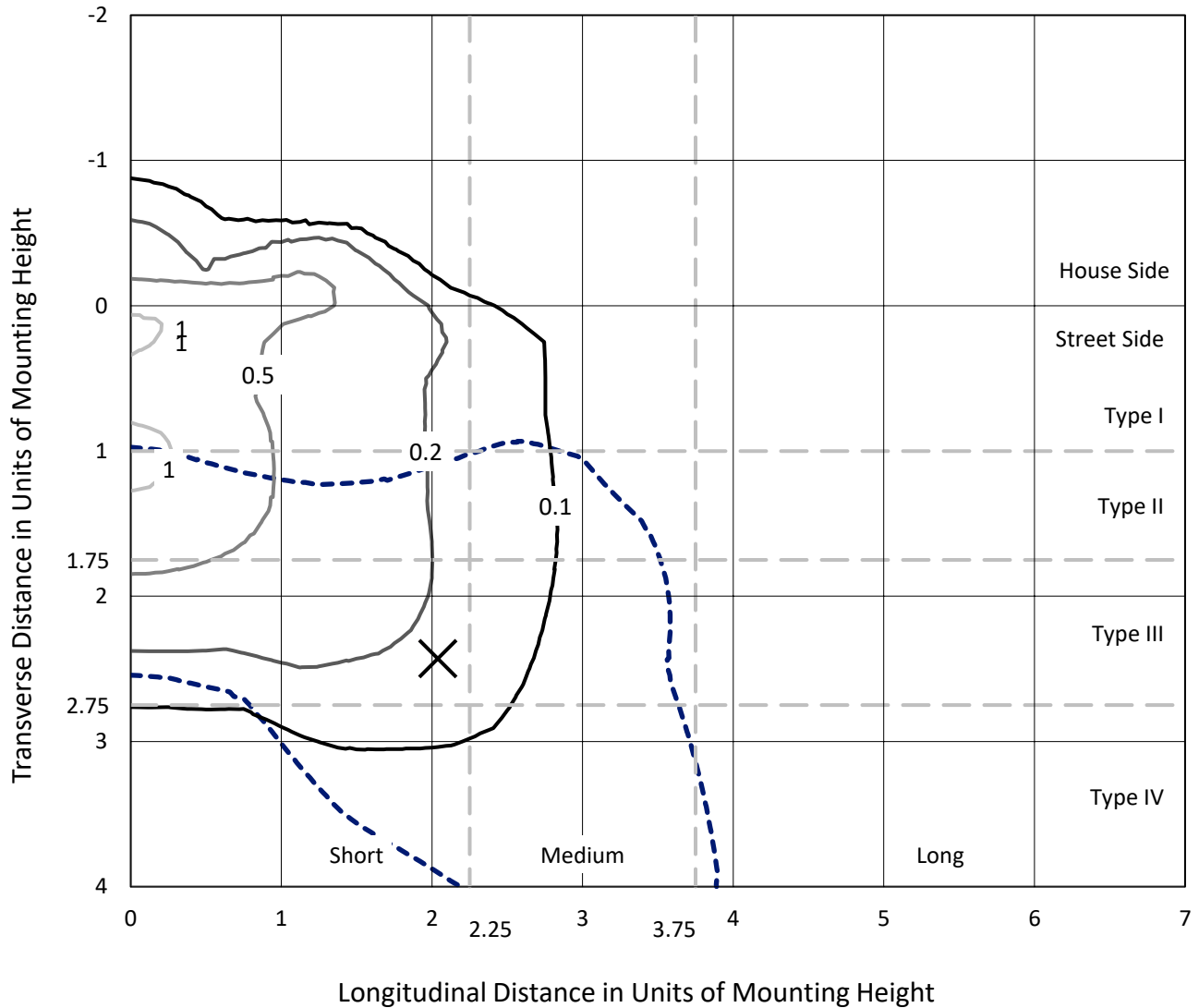
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

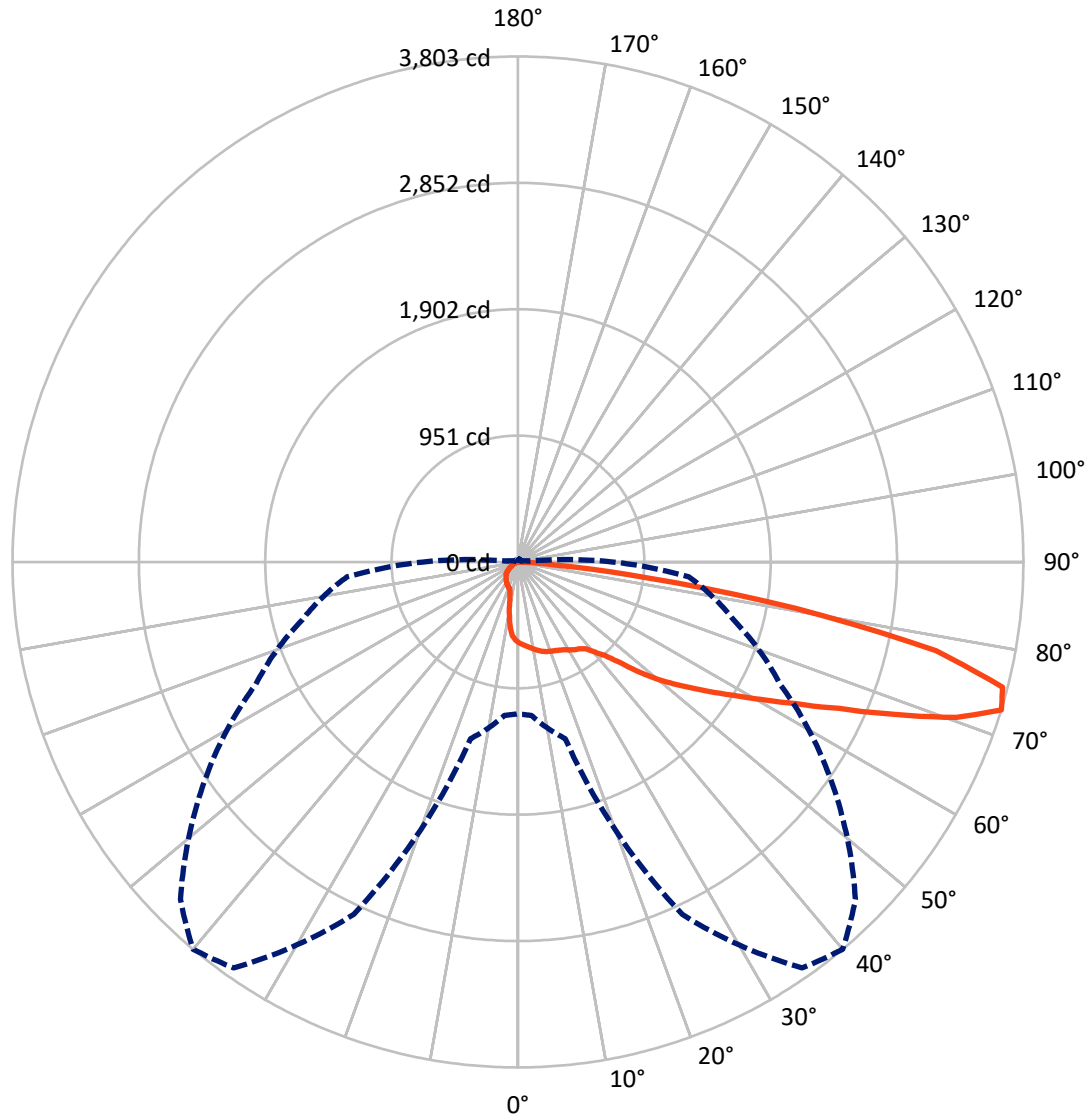
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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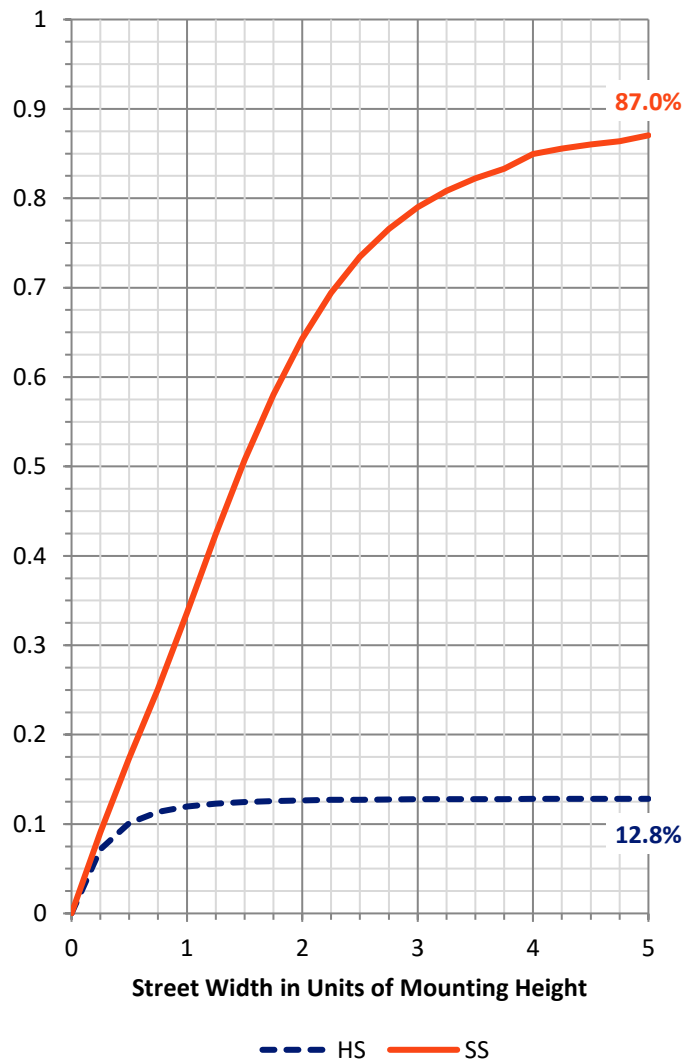
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	591.2	0.0	591.2
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3986.8	0.0	3986.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	4578.0	0.0	4578.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	1.2
10°-20°	150.3	3.3
20°-30°	243.3	5.3
30°-40°	359.1	7.8
40°-50°	604.4	13.2
50°-60°	938.5	20.5
60°-70°	1174.4	25.7
70°-80°	961.4	21.0
80°-90°	91.2	2.0
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°	4578.0	100.0
0°-180°	4578.0	100.0

Coefficient of Utilization



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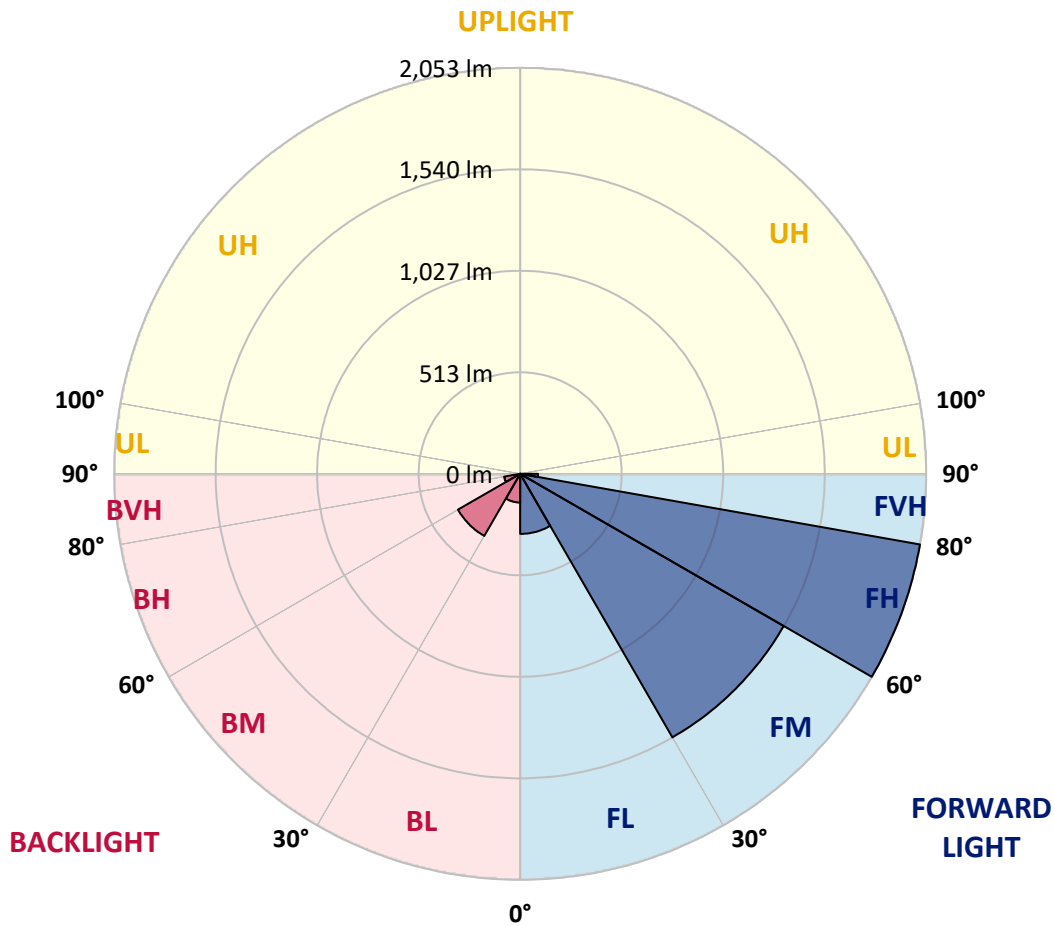
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	303.8	6.6			
FM (30°-60°)	1539.0	33.6			
FH (60°-80°)	2053.4	44.9			G2/5000
FVH (80°-90°)	90.5	2.0			G1/100
BL (0°-30°)	145.1	3.2	B1/500		
BM (30°-60°)	363.0	7.9	B1/1000		
BH (60°-80°)	82.4	1.8	B0/110		G0/110
BVH (80°-90°)	0.7	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2
2.5°	624.4	626.9	625.5	622.7	622.0	620.6	618.9	618.2	615.8	613.7	611.3
5°	642.0	644.4	642.7	638.9	637.2	635.5	633.1	631.0	626.2	621.7	616.2
7.5°	661.3	663.4	661.3	655.8	653.1	651.0	647.5	644.4	638.9	632.4	625.5
10°	682.7	684.4	681.3	674.1	669.6	666.5	663.4	660.0	654.8	647.5	639.3
12.5°	702.7	704.8	700.0	691.3	686.2	683.1	679.6	676.8	671.7	664.8	656.2
15°	721.0	724.1	715.8	706.5	700.6	698.2	694.8	693.1	689.6	684.8	676.8
17.5°	734.8	736.8	728.2	717.2	710.6	708.9	706.5	707.5	706.8	704.4	699.3
20°	746.5	747.9	736.5	723.1	715.8	716.2	715.5	718.9	720.3	720.3	719.9
22.5°	761.0	761.3	746.8	729.9	721.3	723.7	724.8	728.6	731.3	734.1	740.3
25°	779.9	779.3	762.0	738.9	731.3	734.8	737.2	738.6	741.7	746.2	760.3
27.5°	808.2	806.2	784.1	753.4	744.4	747.5	752.0	751.3	749.9	753.4	777.2
30°	844.1	841.3	812.0	773.7	765.5	768.2	769.6	763.4	753.4	756.5	792.0
32.5°	901.0	896.1	855.5	796.5	783.7	786.8	785.1	772.4	757.5	760.6	806.8
35°	999.9	988.2	930.6	844.1	804.4	801.0	796.8	784.4	766.2	763.0	819.3
37.5°	1210.3	1189.6	1091.3	936.8	851.3	828.9	816.1	803.7	775.5	763.0	833.4
40°	1447.5	1426.5	1313.0	1092.0	929.2	891.3	861.0	826.5	785.1	767.5	855.5
42.5°	1695.1	1672.0	1555.4	1284.4	1040.6	962.7	906.1	844.8	801.0	781.3	884.8
45°	1971.6	1942.6	1790.2	1485.1	1202.3	1081.3	978.9	882.4	828.6	805.8	924.8
47.5°	2263.3	2225.7	2024.3	1679.9	1376.5	1245.4	1112.0	949.6	869.2	842.4	978.9
50°	2521.9	2484.7	2266.0	1883.7	1539.2	1401.6	1263.7	1042.7	930.3	894.1	1051.7
52.5°	2707.7	2679.5	2486.0	2094.0	1708.5	1548.2	1401.3	1151.0	1007.5	960.3	1137.5
55°	2832.2	2806.4	2641.9	2293.3	1905.4	1709.5	1536.8	1268.5	1100.6	1039.6	1232.3
57.5°	2907.7	2892.9	2754.6	2471.2	2100.5	1886.1	1692.0	1397.8	1210.3	1133.0	1338.2
60°	2934.6	2922.6	2824.6	2640.8	2336.4	2098.1	1874.4	1543.7	1343.4	1239.2	1446.8
62.5°	2862.9	2865.3	2875.0	2841.9	2585.0	2346.4	2093.0	1718.8	1490.9	1359.6	1548.9
65°	2525.3	2545.3	2728.8	3064.6	2914.3	2657.4	2371.2	1932.6	1659.9	1496.4	1629.9
67.5°	2090.9	2119.9	2348.1	3194.9	3265.3	3061.2	2758.8	2205.0	1861.2	1635.7	1660.6
70°	1600.6	1631.6	1908.1	3167.7	3593.9	3502.5	3238.0	2551.5	2069.9	1732.3	1582.3
72.5°	1142.3	1158.2	1376.1	2925.3	3728.7	3803.2	3591.1	2879.8	2176.4	1678.8	1290.6
75°	802.7	799.9	944.4	2355.7	3518.7	3766.6	3467.3	2702.2	1969.5	1333.7	795.8
77.5°	349.6	350.3	471.7	1430.6	2808.4	3217.0	2882.2	1692.6	1373.0	706.8	335.8
80°	90.7	93.4	173.1	569.6	1690.9	2123.3	1757.8	744.1	634.4	172.4	64.1
82.5°	32.1	34.1	79.6	179.0	623.7	973.7	782.7	237.9	165.5	49.3	17.2
85°	9.3	11.0	42.8	54.8	129.0	275.2	190.0	46.2	40.7	25.5	4.5
87.5°	0.0	1.4	8.6	7.6	7.6	5.2	9.7	5.2	6.6	3.1	1.4
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°	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2	606.2
2.5°	609.3	606.9	601.7	596.2	591.0	586.2	584.8	579.6	577.2	577.5	577.2
5°	612.4	607.9	597.9	585.8	573.4	559.3	547.5	531.0	516.9	515.1	514.1
7.5°	620.6	613.4	597.2	573.8	542.7	503.8	467.6	431.7	411.4	400.3	399.6
10°	633.4	623.7	598.9	554.1	488.2	418.6	363.8	318.6	295.5	284.8	282.7
12.5°	648.6	637.9	601.7	520.7	417.9	326.5	267.2	239.6	234.8	234.1	233.8
15°	670.0	658.2	604.8	475.5	341.7	248.6	221.4	221.7	225.5	227.6	227.2
17.5°	693.7	682.0	600.3	420.3	266.5	212.4	211.7	214.8	220.3	222.4	222.1
20°	717.9	706.8	584.4	355.5	215.5	202.4	205.2	208.6	214.1	216.9	216.9
22.5°	742.7	733.1	559.3	286.5	194.5	195.2	198.6	202.1	208.3	211.4	211.4
25°	769.3	761.0	525.8	229.6	185.5	187.6	192.1	196.2	202.7	206.5	206.5
27.5°	796.2	789.9	487.9	191.7	177.2	179.6	184.8	190.3	196.9	201.4	201.7
30°	825.5	822.0	457.6	177.6	169.3	171.4	177.2	183.4	190.7	196.2	196.9
32.5°	855.5	854.8	442.7	187.9	162.1	163.4	168.6	174.8	183.8	190.7	191.4
35°	885.1	886.5	434.1	217.2	159.6	155.9	159.3	164.8	175.5	184.1	185.5
37.5°	923.0	926.5	433.8	248.9	165.5	148.3	150.7	154.5	163.8	173.8	175.5
40°	979.6	997.9	455.8	276.2	175.8	141.4	142.1	142.7	147.6	155.9	158.6
42.5°	1054.8	1108.2	535.5	294.8	180.0	135.2	132.7	129.0	128.3	132.7	135.2
45°	1148.2	1241.6	675.5	305.2	175.8	128.3	121.7	111.7	107.9	111.0	111.0
47.5°	1258.2	1387.8	841.3	307.6	169.0	119.6	107.9	94.8	91.7	92.8	92.4
50°	1365.4	1497.5	987.2	287.6	157.6	108.6	92.8	81.7	79.6	80.0	80.0
52.5°	1460.2	1535.1	1028.5	240.3	142.4	95.2	79.6	72.1	70.7	70.7	70.3
55°	1523.0	1494.4	917.2	183.8	123.4	81.4	68.3	64.5	63.8	63.4	62.8
57.5°	1536.1	1362.0	692.7	132.7	96.5	68.6	60.7	58.6	57.2	55.9	55.2
60°	1489.2	1141.3	441.0	92.8	72.4	58.6	53.8	52.4	49.7	46.9	45.9
62.5°	1387.8	862.0	244.1	64.5	58.3	50.0	47.6	45.9	40.7	36.2	34.8
65°	1251.6	573.1	107.9	50.3	47.6	42.1	40.7	38.3	32.1	26.9	25.9
67.5°	1114.7	330.0	48.6	40.3	38.3	34.5	33.4	31.7	27.2	22.4	21.7
70°	958.6	167.2	33.4	32.1	29.7	26.2	27.2	26.9	22.4	18.3	17.6
72.5°	713.7	83.1	25.2	24.1	21.4	18.6	22.4	22.1	17.6	13.8	13.1
75°	404.1	41.0	18.3	16.9	12.8	13.8	17.9	16.9	12.1	9.0	8.3
77.5°	160.3	21.0	12.1	10.3	7.6	9.3	13.1	11.4	6.2	3.8	3.4
80°	36.9	10.3	6.2	4.5	3.4	5.5	6.9	4.1	1.7	0.3	0.0
82.5°	10.3	4.5	2.1	1.7	1.7	2.1	1.7	0.7	0.0	0.0	0.0
85°	3.4	2.1	0.7	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.4	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)