

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: P882638

Luminaire Tested: **NAV-SB2C-835-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882638  
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-SB2C-835-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

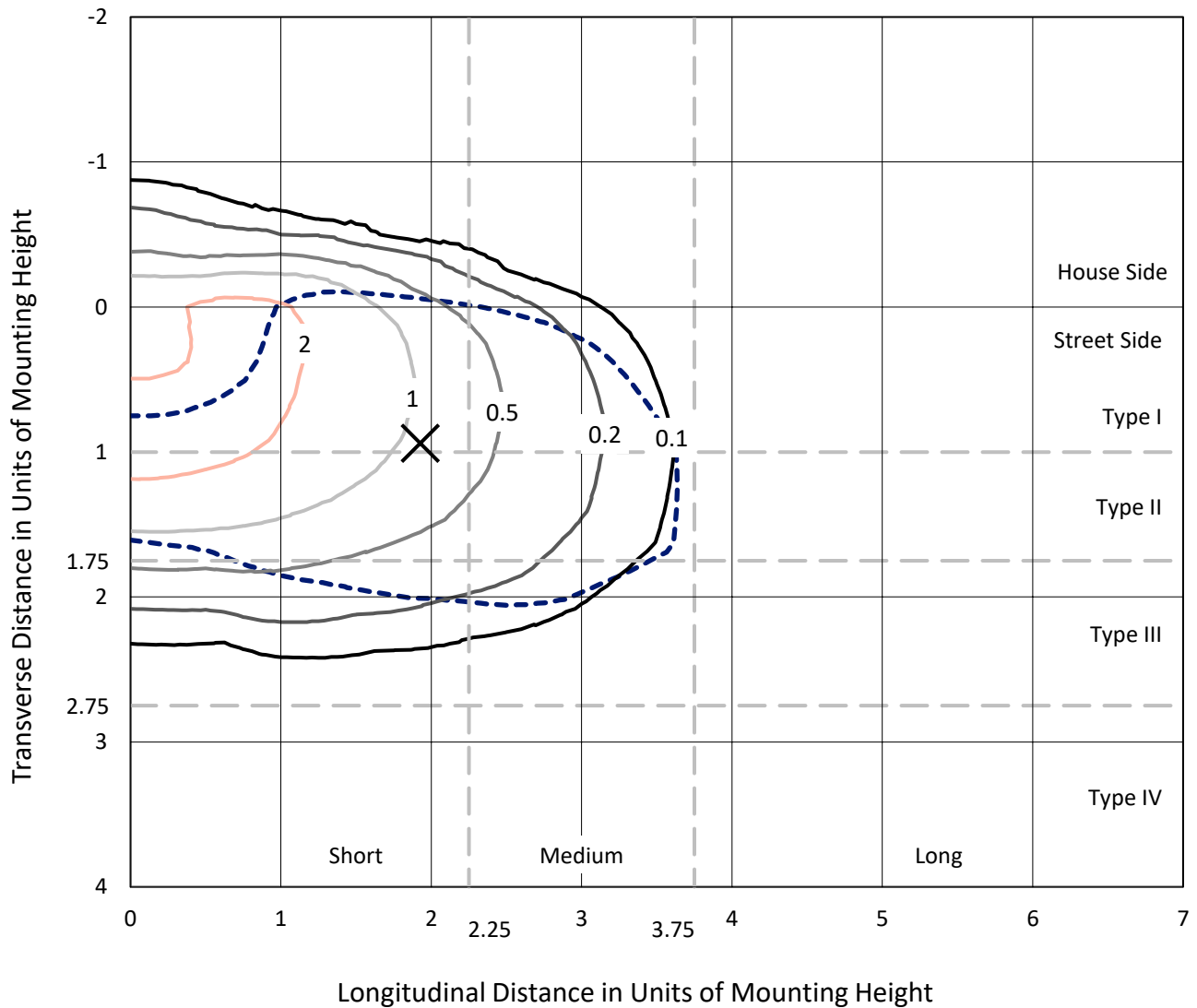
Lumens per Lamp: N/A  
Luminaire Lumens: 10100 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.857  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
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

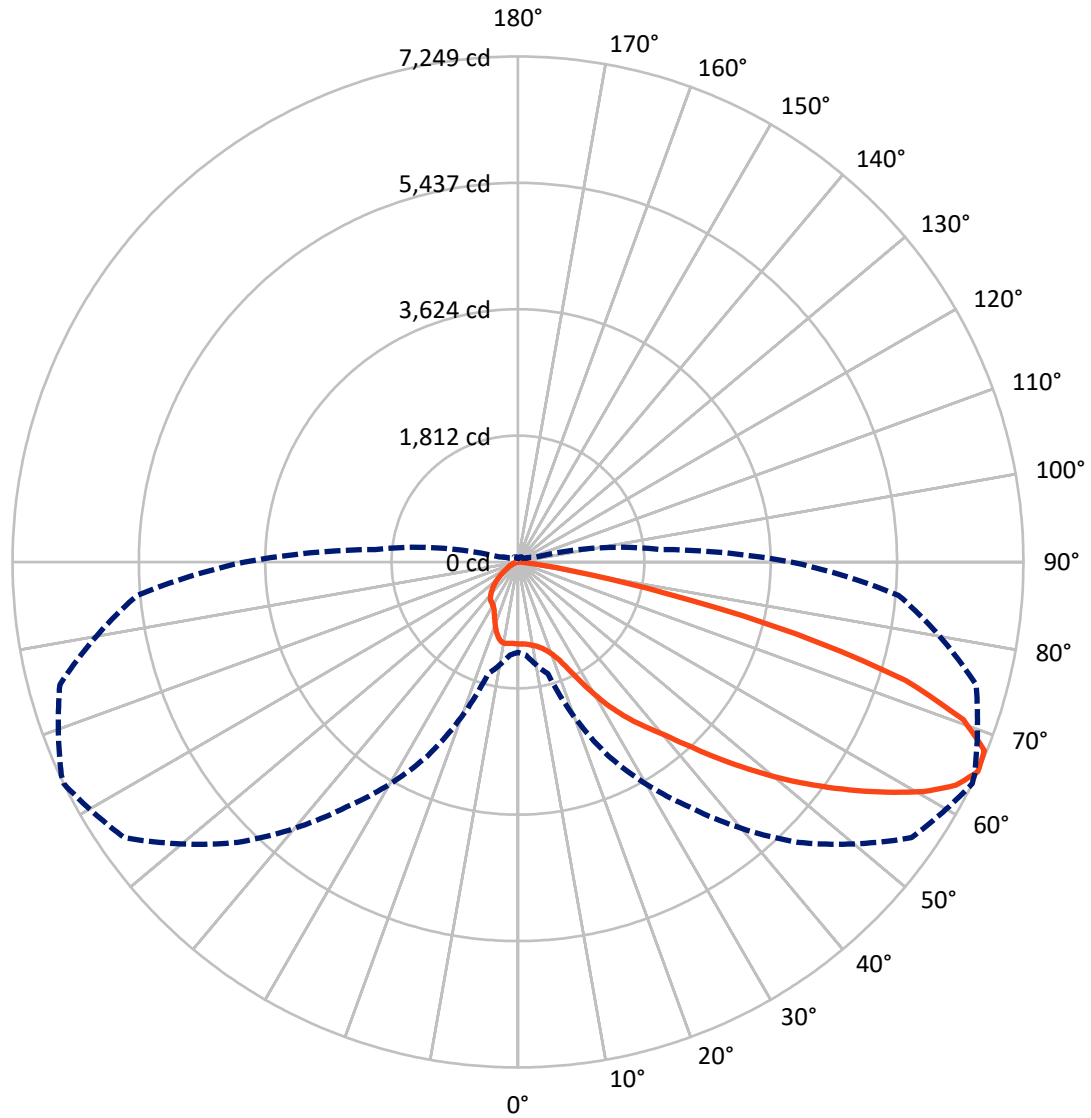
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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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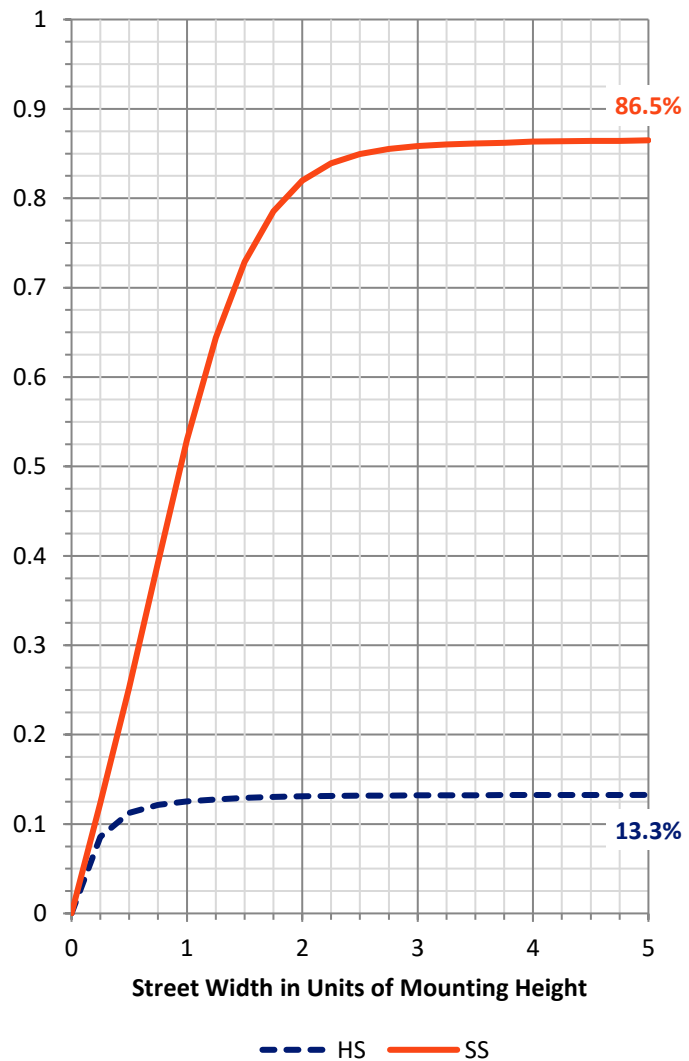
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1350.7	0.0	1350.7
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	8749.3	0.0	8749.3
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	10100.0	0.0	10100.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.4	1.1
10°-20°	294.0	2.9
20°-30°	557.0	5.5
30°-40°	1127.2	11.2
40°-50°	1920.1	19.0
50°-60°	2611.2	25.9
60°-70°	2452.1	24.3
70°-80°	982.4	9.7
80°-90°	47.6	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°	10100.0	100.0
0°-180°	10100.0	100.0

**Coefficient of Utilization**



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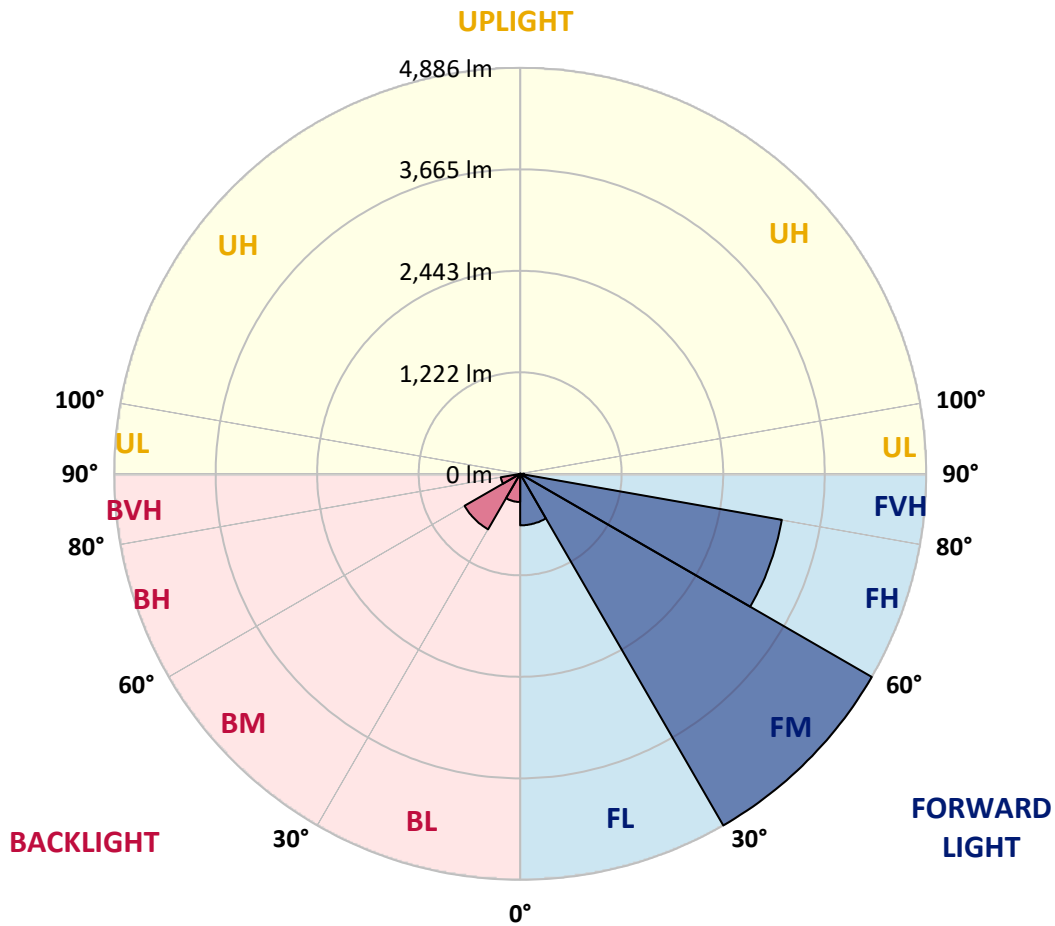
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	620.3	6.1			
FM (30°-60°)	4886.4	48.4			
FH (60°-80°)	3197.4	31.7			G2/5000
FVH (80°-90°)	45.3	0.4			G1/100
BL (0°-30°)	339.1	3.4	B1/500		
BM (30°-60°)	772.2	7.6	B1/1000		
BH (60°-80°)	237.1	2.3	B1/500		G1/500
BVH (80°-90°)	2.3	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°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7
2.5°	1170.7	1178.8	1176.8	1174.7	1174.1	1175.4	1176.1	1175.4	1175.4	1175.4	1176.1
5°	1148.3	1155.1	1155.1	1159.8	1166.6	1174.7	1180.8	1182.2	1183.5	1185.6	1184.9
7.5°	1105.7	1111.1	1115.2	1130.7	1147.7	1169.3	1187.6	1197.1	1198.4	1205.9	1208.6
10°	1076.6	1083.3	1090.1	1106.3	1130.7	1163.2	1194.4	1217.4	1220.8	1238.4	1246.5
12.5°	1075.2	1082.0	1090.8	1108.4	1136.8	1171.3	1209.3	1242.4	1248.5	1274.3	1291.2
15°	1089.4	1097.5	1105.7	1127.3	1157.8	1199.8	1240.4	1281.7	1287.8	1324.4	1342.7
17.5°	1118.5	1129.4	1135.5	1157.1	1189.6	1236.3	1289.8	1337.2	1342.7	1385.3	1408.3
20°	1176.1	1189.0	1191.0	1208.6	1240.4	1290.5	1354.2	1413.1	1419.8	1468.6	1494.3
22.5°	1295.3	1313.5	1297.3	1306.1	1334.5	1384.6	1453.7	1528.2	1537.7	1593.2	1616.2
25°	1505.2	1530.9	1488.9	1474.0	1486.2	1538.3	1625.0	1719.1	1729.9	1774.6	1786.1
27.5°	1917.5	1884.3	1820.7	1758.4	1721.8	1751.6	1849.1	1965.6	1979.1	2022.4	2008.9
30°	2370.5	2341.3	2255.4	2117.2	2030.6	2025.8	2115.9	2245.9	2261.4	2302.8	2261.4
32.5°	2824.1	2796.3	2702.9	2533.0	2382.6	2308.2	2370.5	2514.7	2522.8	2549.2	2488.3
35°	3270.3	3241.9	3148.4	2974.4	2789.6	2620.3	2608.1	2770.6	2773.3	2801.1	2710.4
37.5°	3719.2	3695.5	3596.0	3425.4	3243.2	3009.6	2896.6	3013.0	3016.4	3043.5	2949.4
40°	4039.5	4049.6	3981.2	3849.2	3692.8	3437.5	3220.2	3271.0	3250.7	3296.0	3239.8
42.5°	4314.4	4334.7	4275.1	4208.7	4118.0	3893.2	3621.0	3612.2	3579.7	3604.1	3545.9
45°	4552.0	4568.9	4515.5	4499.9	4497.8	4340.1	4059.1	4006.3	3960.9	3956.2	3886.4
47.5°	4639.4	4671.9	4694.9	4747.0	4848.6	4782.2	4512.1	4430.1	4379.4	4342.1	4231.8
50°	4672.5	4707.1	4785.6	4937.3	5177.6	5206.1	4963.0	4870.9	4808.6	4740.9	4578.4
52.5°	4627.8	4689.5	4795.1	5050.3	5399.0	5546.0	5395.7	5315.1	5244.0	5133.6	4892.6
55°	4364.5	4426.1	4642.1	5049.0	5509.4	5784.3	5804.6	5768.7	5688.8	5514.8	5146.5
57.5°	3809.3	3900.7	4242.6	4877.0	5507.4	5989.5	6205.4	6231.2	6141.8	5892.6	5346.2
60°	3040.1	3164.0	3581.1	4495.8	5337.4	6100.5	6556.8	6685.5	6590.7	6265.0	5508.1
62.5°	2121.3	2264.8	2659.6	3898.6	4948.8	6020.6	6813.5	7051.1	6979.3	6598.2	5570.3
65°	1293.9	1339.9	1658.2	3067.9	4288.0	5686.1	6892.7	7248.8	7225.1	6802.0	5478.3
67.5°	861.9	900.5	991.9	2103.7	3328.5	5017.8	6703.1	7214.3	7221.1	6768.8	5141.1
70°	519.3	552.5	612.1	1223.5	2157.2	3971.8	6116.1	6774.2	6813.5	6325.3	4501.9
72.5°	214.0	236.3	290.5	554.5	1117.2	2520.8	4870.2	5816.1	5907.5	5318.5	3455.1
75°	121.2	132.7	170.6	278.3	484.8	1174.7	2950.0	4128.8	4263.6	3665.7	2078.6
77.5°	80.6	86.0	110.4	180.1	272.9	400.8	1260.7	2151.1	2408.4	2002.1	899.8
80°	54.2	58.9	75.8	120.5	177.4	172.0	401.5	796.9	980.4	687.9	219.4
82.5°	36.6	37.2	54.2	79.2	112.4	83.3	118.5	247.8	311.5	199.1	83.3
85°	21.0	20.3	39.9	46.0	50.1	34.5	35.9	74.5	97.5	84.0	47.4
87.5°	2.7	4.1	15.6	12.2	6.8	7.4	7.4	12.9	19.0	20.3	10.2
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°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7
2.5°	1176.1	1175.4	1173.4	1171.3	1166.6	1163.9	1165.3	1163.9	1163.2	1163.9	1166.6
5°	1184.9	1182.9	1177.4	1170.7	1161.2	1149.7	1142.2	1131.4	1121.2	1115.2	1116.5
7.5°	1208.6	1206.6	1199.1	1180.2	1149.7	1101.6	1057.6	1019.0	989.9	973.0	973.6
10°	1246.5	1243.1	1231.6	1189.6	1109.7	1004.8	917.4	845.0	797.6	775.3	773.2
12.5°	1291.2	1287.1	1266.8	1180.8	1033.9	870.0	749.5	669.0	624.9	605.3	603.3
15°	1344.0	1338.6	1298.6	1138.8	923.5	721.1	610.7	550.5	522.0	504.4	505.1
17.5°	1409.7	1400.2	1322.3	1075.9	803.7	607.3	525.4	480.1	455.0	438.1	436.7
20°	1495.0	1479.4	1341.3	1000.7	693.3	535.6	467.9	429.9	411.0	396.1	393.4
22.5°	1614.2	1591.8	1364.3	919.5	615.5	486.1	425.2	397.4	381.9	364.9	362.2
25°	1761.8	1735.4	1392.8	844.3	562.0	443.5	394.1	371.0	352.8	333.1	331.1
27.5°	1968.3	1920.9	1426.6	782.7	515.9	406.9	365.6	339.9	318.9	302.7	299.3
30°	2198.5	2120.6	1456.4	745.5	474.0	373.1	328.4	302.7	283.0	271.5	269.5
32.5°	2416.5	2310.9	1476.0	729.2	436.0	334.5	287.8	260.0	245.1	241.7	243.7
35°	2622.3	2482.9	1474.0	713.6	402.2	295.9	247.8	219.4	207.9	209.9	209.9
37.5°	2859.3	2666.3	1459.8	689.3	374.4	260.7	213.3	188.2	178.1	178.7	181.5
40°	3134.9	2878.3	1451.0	643.2	344.0	228.2	184.8	164.5	157.1	154.4	153.7
42.5°	3428.7	3083.4	1452.3	591.1	306.0	199.1	165.2	148.3	141.5	139.5	138.8
45°	3723.9	3279.1	1454.4	536.9	266.1	176.7	151.0	136.8	132.7	130.0	130.0
47.5°	4001.5	3445.7	1416.5	478.7	226.8	159.8	139.5	130.0	126.6	123.2	123.2
50°	4260.2	3556.7	1325.0	411.0	195.7	146.2	130.7	123.9	120.5	117.1	117.1
52.5°	4461.3	3574.3	1174.1	341.2	174.0	136.1	125.3	119.2	115.1	111.7	111.0
55°	4550.7	3463.9	959.4	276.2	157.1	127.3	119.8	113.7	109.0	105.6	104.9
57.5°	4527.6	3231.7	748.2	222.1	140.8	118.5	113.1	109.0	103.6	98.2	97.5
60°	4414.6	2920.9	564.0	184.8	125.9	109.0	105.6	102.2	94.8	86.7	85.3
62.5°	4218.9	2530.3	402.2	153.0	109.7	98.2	96.8	94.1	83.3	68.4	67.0
65°	3919.6	2055.6	270.8	127.3	94.1	86.0	86.7	81.9	67.7	50.8	49.4
67.5°	3482.2	1503.1	173.3	104.3	78.5	71.8	72.4	69.7	57.6	43.3	41.3
70°	2925.0	995.3	113.1	79.2	63.0	55.5	59.6	60.3	48.7	35.2	33.9
72.5°	2144.3	587.7	79.2	58.9	46.0	38.6	48.7	50.1	39.3	26.4	25.1
75°	1222.1	279.0	59.6	42.7	28.4	27.1	37.9	37.9	27.1	17.6	16.2
77.5°	513.2	116.5	42.0	27.8	16.2	15.6	25.7	23.7	13.5	8.1	8.1
80°	148.3	52.1	22.3	13.5	6.8	6.1	10.2	7.4	3.4	1.4	1.4
82.5°	58.2	23.0	8.8	5.4	2.7	2.7	1.4	0.0	0.0	0.0	0.0
85°	34.5	9.5	4.1	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	2.0	1.4	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)