

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: McGRAW-EDISON

Report Number: P833543

Luminaire Tested: **TTN-D2-735-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833543
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D2-735-U-WQ-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5303.8 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

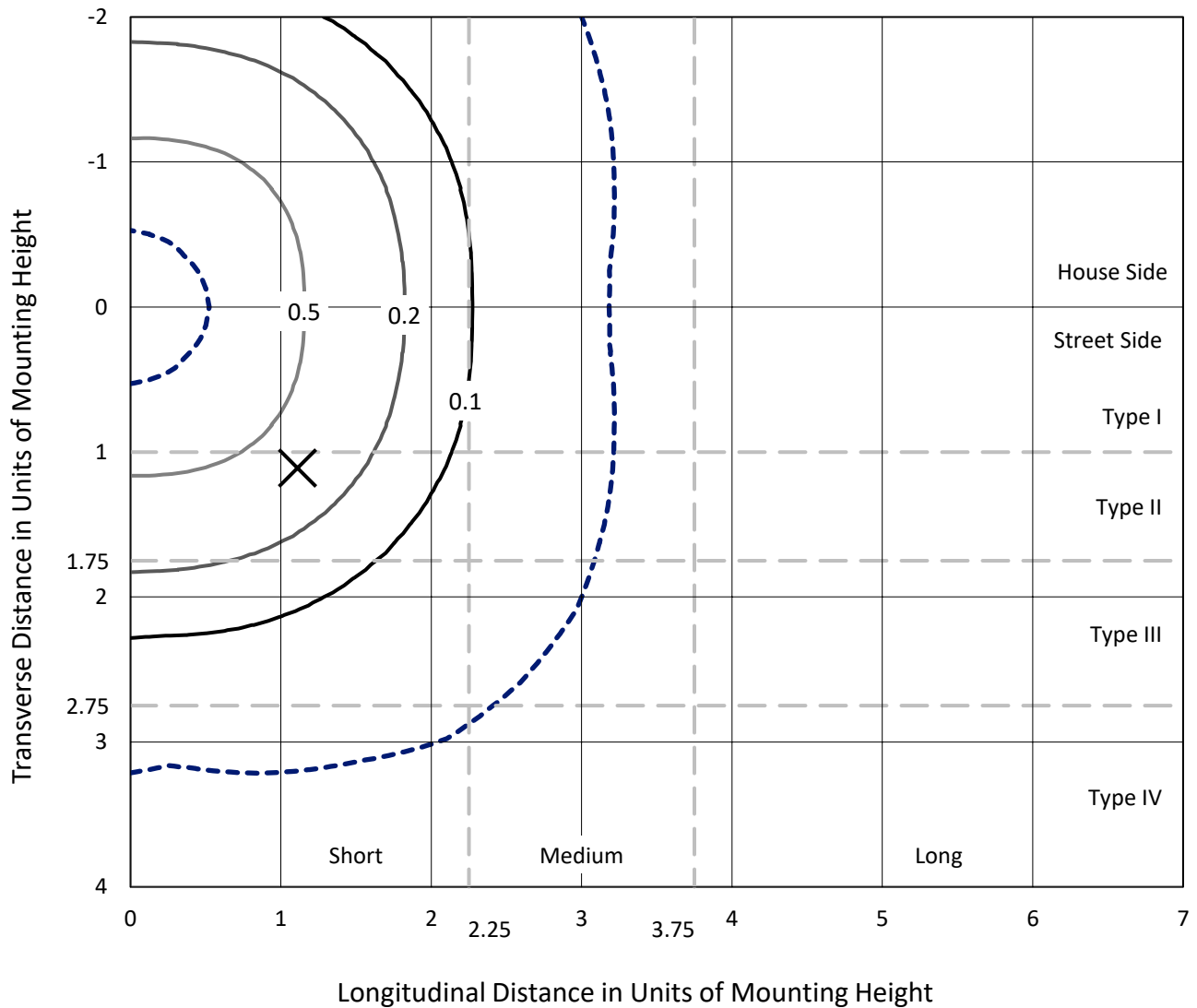
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

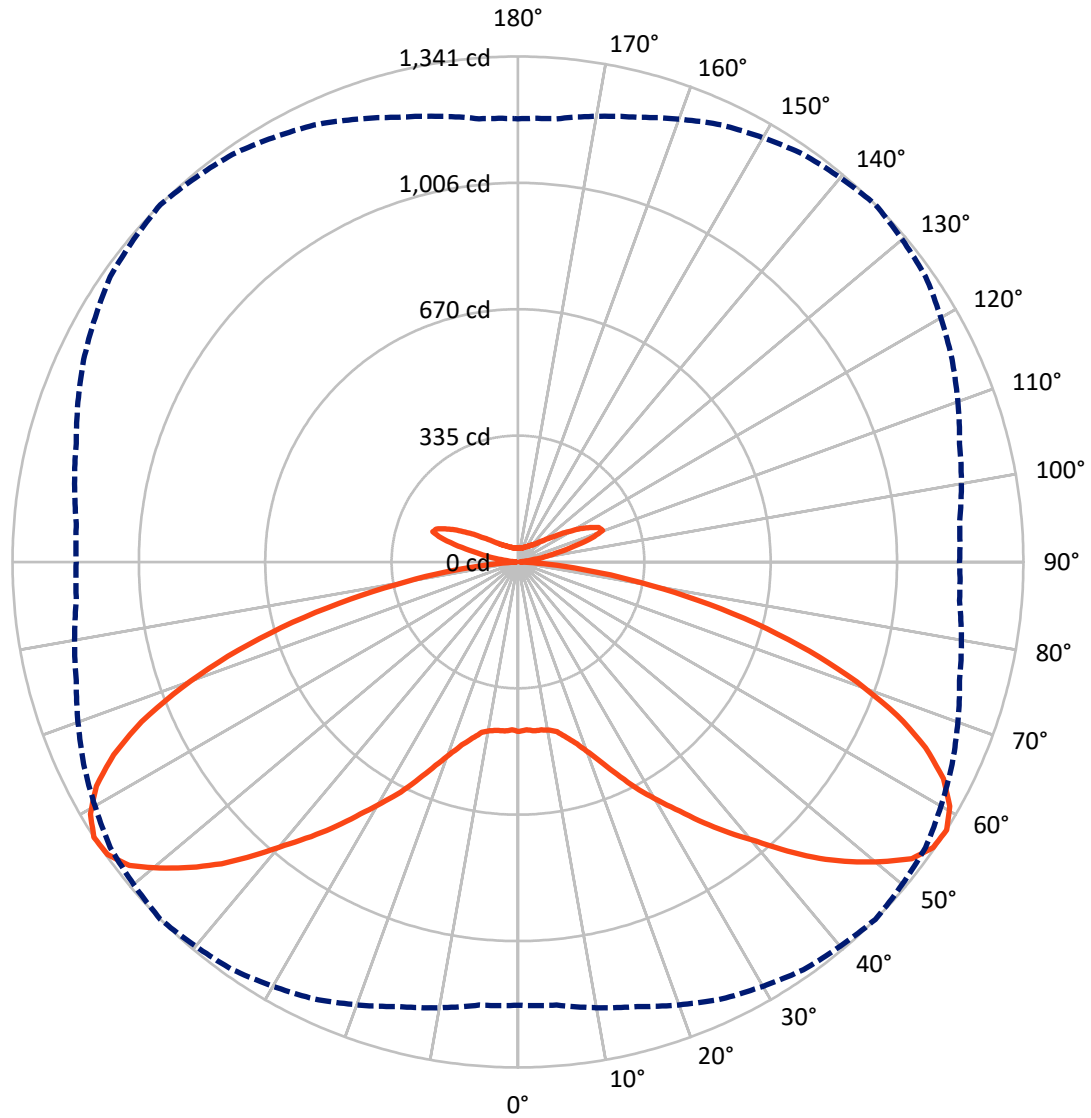
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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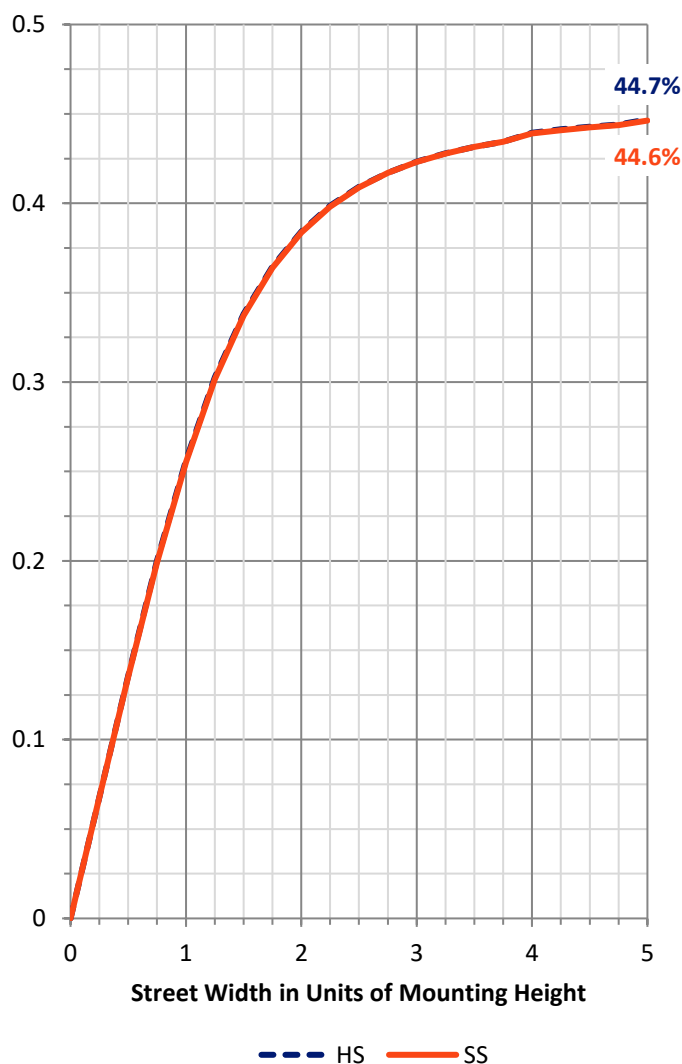
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2380.4	271.5	2651.9
	% Fixture	44.9	5.1	50.0
Street Side	Lumens	2380.4	271.5	2651.9
	% Fixture	44.9	5.1	50.0
Total	Lumens	4760.7	543.0	5303.8
	% Fixture	89.8	10.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.8
10°-20°	138.6	2.6
20°-30°	291.7	5.5
30°-40°	525.9	9.9
40°-50°	836.0	15.8
50°-60°	1115.3	21.0
60°-70°	1077.6	20.3
70°-80°	624.4	11.8
80°-90°	108.4	2.0
90°-100°	12.1	0.2
100°-110°	123.2	2.3
110°-120°	180.1	3.4
120°-130°	104.5	2.0
130°-140°	55.4	1.0
140°-150°	32.9	0.6
150°-160°	20.2	0.4
160°-170°	11.0	0.2
170°-180°	3.6	0.1
0°-90°	4760.7	89.8
0°-180°	5303.8	100.0

Coefficient of Utilization

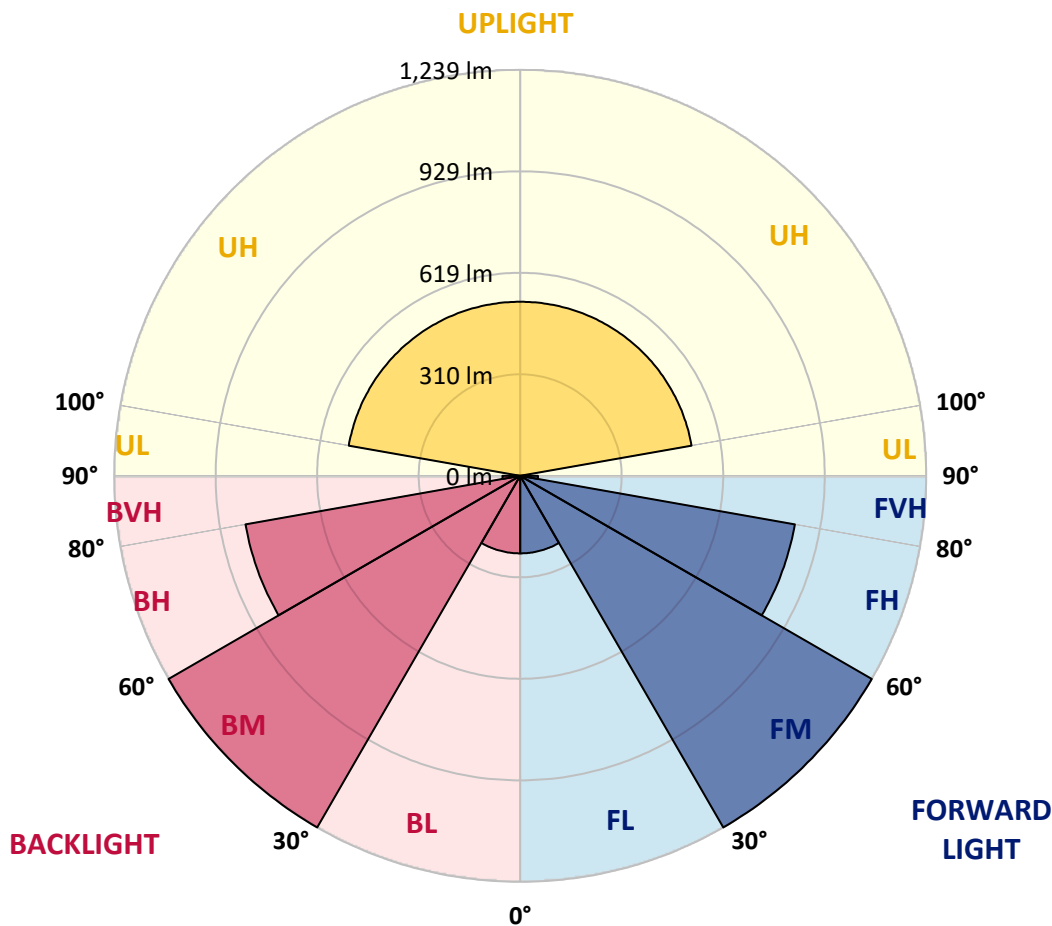


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	236.6	4.5			
FM (30°-60°)	1238.6	23.4			
FH (60°-80°)	851.0	16.0			G1/1800
FVH (80°-90°)	54.2	1.0			G1/100
BL (0°-30°)	236.6	4.5	B1/500		
BM (30°-60°)	1238.6	23.4	B2/2500		
BH (60°-80°)	851.0	16.0	B2/1000		G1/1800
BVH (80°-90°)	54.2	1.0			G1/100
UL (90°-100°)	12.1	0.2		U2/50	
UH (100°-180°)	530.9	10.0		U4/1000	

BUG Rating: B2-U4-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7
2.5°	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5
5°	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7
7.5°	445.5	445.5	449.7	449.7	449.7	449.7	449.7	449.7	449.7	445.5	445.5
10°	449.7	449.7	449.7	453.8	453.8	453.8	453.8	453.8	449.7	449.7	449.7
12.5°	457.9	457.9	462.0	462.0	462.0	462.0	462.0	462.0	462.0	457.9	457.9
15°	478.5	478.5	478.5	482.7	482.7	482.7	482.7	482.7	478.5	478.5	478.5
17.5°	499.2	499.2	503.3	503.3	507.4	507.4	507.4	503.3	503.3	503.3	503.3
20°	528.0	528.0	532.2	532.2	536.3	540.4	540.4	536.3	532.2	532.2	532.2
22.5°	565.2	569.3	569.3	569.3	573.4	581.7	577.6	573.4	569.3	569.3	569.3
25°	610.6	614.7	618.8	618.8	622.9	631.2	631.2	618.8	618.8	618.8	618.8
27.5°	664.2	668.3	672.4	672.4	676.6	684.8	680.7	672.4	672.4	668.3	668.3
30°	713.7	717.8	721.9	726.1	730.2	734.3	734.3	726.1	721.9	717.8	713.7
32.5°	763.2	763.2	771.4	779.7	787.9	787.9	792.1	779.7	771.4	763.2	759.1
35°	812.7	816.8	820.9	833.3	845.7	849.8	845.7	833.3	820.9	812.7	812.7
37.5°	866.3	870.5	874.6	891.1	903.5	911.7	903.5	891.1	874.6	866.3	862.2
40°	924.1	928.2	932.3	953.0	965.3	973.6	961.2	948.8	932.3	924.1	920.0
42.5°	977.7	986.0	994.2	1019.0	1039.6	1047.8	1035.5	1014.8	998.3	977.7	973.6
45°	1043.7	1052.0	1064.3	1089.1	1109.7	1122.1	1105.6	1085.0	1060.2	1043.7	1039.6
47.5°	1097.3	1105.6	1118.0	1151.0	1179.9	1188.1	1171.6	1146.9	1113.8	1093.2	1089.1
50°	1138.6	1146.9	1171.6	1208.7	1241.7	1250.0	1233.5	1200.5	1163.4	1134.5	1130.3
52.5°	1171.6	1179.9	1208.7	1258.2	1295.4	1307.7	1287.1	1250.0	1200.5	1167.5	1163.4
55°	1188.1	1192.2	1229.4	1283.0	1320.1	1336.6	1316.0	1274.7	1221.1	1184.0	1179.9
57.5°	1175.7	1179.9	1221.1	1278.9	1320.1	1340.7	1320.1	1270.6	1212.9	1175.7	1171.6
60°	1151.0	1151.0	1188.1	1254.1	1303.6	1316.0	1295.4	1245.9	1184.0	1146.9	1142.7
62.5°	1105.6	1101.5	1146.9	1204.6	1254.1	1266.5	1250.0	1200.5	1138.6	1101.5	1097.3
65°	1019.0	1010.7	1076.7	1130.3	1175.7	1188.1	1175.7	1130.3	1072.6	1014.8	1006.6
67.5°	915.8	903.5	965.3	1027.2	1068.5	1085.0	1068.5	1031.3	965.3	907.6	903.5
70°	808.6	796.2	845.7	899.3	944.7	953.0	936.5	899.3	837.4	800.3	800.3
72.5°	680.7	668.3	713.7	754.9	800.3	808.6	792.1	759.1	713.7	676.6	672.4
75°	540.4	528.0	569.3	602.3	647.7	651.8	643.6	606.4	569.3	532.2	532.2
77.5°	400.2	387.8	420.8	449.7	486.8	486.8	482.7	453.8	420.8	396.0	396.0
80°	264.0	255.8	284.6	297.0	330.0	330.0	325.9	305.3	280.5	264.0	259.9
82.5°	148.5	140.3	165.0	169.1	193.9	193.9	189.8	173.3	156.8	144.4	144.4
85°	57.8	49.5	66.0	70.1	82.5	82.5	78.4	74.3	61.9	53.6	53.6
87.5°	4.1	4.1	8.3	8.3	12.4	12.4	12.4	8.3	8.3	4.1	4.1
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)